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PSYCHOPHARMACOLOGY



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&  
International Symposium on Child and Adolescent  
Psychopharmacology**

Overcoming Challenges: Psychiatry and Psychopharmacology  
in the Post-pandemic Era

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## INVITATION

It is our great pleasure to announce that the Turkish Association for Psychopharmacology (TAP)'s 13th International Congress on Psychopharmacology & International Symposium on Child and Adolescent Psychopharmacology (ICP 2022) will be held on November 09-12, 2022 in Antalya, Turkey.

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ICP 2022 Oral Research Presentations &  
Poster Research Presentations Abstracts

## INDEX

<b>Oral Research Presentations</b> .....	13
<b>0011 - Screening of psychiatric symptoms in patients with insulin resistance</b> .....	14
Meltem Puşuroğlu <sup>1</sup> , Damla Tüfekçi <sup>2</sup> , Çiçek Hoccoğlu <sup>1</sup> .....	14
<b>0013 - Do peer problems mediate the association between sluggish cognitive tempo and gaming disorder?</b> .....	15
Nuran Gözpinar .....	15
<b>0015 - Children and adolescents with family and in institutional care: assessment of attachment styles and theory of mind skills</b> .....	17
Mehtap Eroğlu <sup>1</sup> , Neşe Yakşi <sup>2</sup> , Ummugulsum Gundogdu <sup>3</sup> .....	17
<b>0019 - The association between attention deficit hyperactivity disorder and pathological internet use among adolescents</b> .....	18
Songül Derin <sup>1</sup> , Özge Ünal <sup>2</sup> , Saliha Busra Selman <sup>3</sup> .....	18
<b>0020 - Neurocognitive functions and behavior outcome of preschool-age children with a history of febrile convulsions</b> .....	19
Nuran Gözpinar <sup>1</sup> , Bilgihan Bıkmazer <sup>2</sup> , Oğuzhan Koyuncu <sup>1</sup> , Aigiun Guseinova <sup>1</sup> , Ferit Durankuş <sup>3</sup> , Elif Yüksel Karatoprak <sup>4</sup> , Nilüfer Eldeş Hacifazlıoğlu <sup>2</sup> , Alperen Bıkmazer <sup>1</sup> , Vahdet Görmez <sup>1</sup> .....	19
<b>0024 - Comparison of the screen time of children with attention deficit hyperactivity disorder and healthy controls during the pandemic period</b> .....	20
Asiye Arıcı Gürbüz <sup>1</sup> , Mehmet Karadağ <sup>2</sup> .....	20
<b>0027 - The Relationship between inflammatory parameters and diagnoses of inpatients in the child and adolescent psychiatry service</b> .....	21
Merve Aktaş Terzioğlu <sup>1</sup> , Behiye Sena Palamutçu <sup>1</sup> , Gülşen Ünlü <sup>1</sup> , Bürge Kabukçu Başay <sup>1</sup> , Ömer Başay <sup>1</sup> , Ahmet Büber <sup>1</sup> , Hande Şenol <sup>2</sup> .....	21
<b>0041 - Evaluation of c-reactive protein and procalcitonin levels in patients with autism spectrum disorder and attention deficit hyperactivity disorder</b> .....	22
Öznur Adıgüzel Akman <sup>1</sup> , Erman Esnafoğlu <sup>2</sup> .....	22
<b>0042 - Turkish version of the nine item arfid screen parent form: validity and reliability study in a pediatric sample</b> .....	23
Elif Akçay <sup>1</sup> , Özge Parlak Gözükarı <sup>1</sup> , Büşra Bahadır <sup>1</sup> , Funda Seher Özalp <sup>2</sup> , Eda Özaydın <sup>3</sup> , Gülser Şenses Dinç <sup>1</sup> .....	23
<b>0043 - Suicide probability, depression, anxiety, and burnout in assistant doctors</b> .....	24
Gizem Nur Pala <sup>1</sup> , Özgen Özçelik <sup>2</sup> , Ali Erdoğan <sup>1</sup> .....	24
<b>0049 - Sexual and religious obsessions in pediatric obsessive-compulsive disorder: outcome of day treatment</b> .....	25
Burcu Kardeş, Ömer Kardeş, Nursu Çakın Memik .....	25
<b>0054 - Examination of electrocardiographic parameters in children with Autism Spectrum Disorder</b> .	26

Cansu Çobanoğlu Osmanlı <sup>1</sup> , Berkan Şahin <sup>1</sup> , Bedia Sultan Önal <sup>1</sup> , Esra Hoşoğlu <sup>2</sup> , Yusuf Hoşoğlu <sup>3</sup> , Ceren Varer Akpınar <sup>4</sup> .....	26
<b>0055 - The Relationship between autistic traits and peer bullying, loneliness and anxiety in adolescents</b> .....	<b>27</b>
Betul Damla Demirel, Pinar Aydoğan Avsar .....	27
<b>0056 - Effects of attachment and maternal functioning on preschool ADHD and conduct problems.....</b>	<b>28</b>
Tuğba Didem Kuşcu, Funda Gümüştaş, Osman Sabuncuoğlu .....	28
<b>0057 - Retinal thickness in autism spectrum disorder compared to healthy siblings and healthy control group</b> .....	<b>29</b>
Kardelen Akbal <sup>1</sup> , Esra Taşkın Çöp <sup>1</sup> , Pnar Naçacıoğlu Memiş <sup>2</sup> .....	29
<b>0058 - Comparison of TSH and ft4 serum levels of obsessive-compulsive disorder patients with the healthy control group</b> .....	<b>30</b>
Yaşar Kapıcı .....	30
<b>0059 - Comparison of inflammatory parameters of bipolar depression, unipolar depression, and healthy controls</b> .....	<b>31</b>
Yaşar Kapıcı .....	31
<b>0063 - Comorbidities and sociodemographic characteristics of children and adolescents with eating disorders: An inpatient psychiatric sample</b> .....	<b>32</b>
Elif Akçay <sup>1</sup> , Özge Parlak Gözükara <sup>1</sup> , Alkim Öden Akman <sup>2</sup> , Esra Çöp <sup>1</sup> , Gülser Şenses Dinç <sup>1</sup> .....	32
<b>0066 - Evaluation of malondialdehyde, superoxide dismutase and catalase activity in euthymic bipolar patients</b> .....	<b>33</b>
Onur Hursitoglu <sup>1</sup> , Omer Faruk Uygur <sup>2</sup> .....	33
<b>0070 - Relationship between peer relations, parental attachment styles, and level of tendency to violence in adolescents diagnosed with attention deficit and hyperactivity disorder</b> .....	<b>34</b>
Didem Ayyıldız, Barış Güller, Ferhat Yaylacı .....	34
<b>0071 - The Relationship between psychological pain and suicide in patients with bipolar disorder</b> .....	<b>34</b>
Mahmut Onur Karaytuğ, Lut Tamam, Mehmet Emin Demirkol, Zeynep Namlı .....	34
<b>0072 - Neurological soft signs in obsessive compulsive disorder</b> .....	<b>35</b>
Rıza Gökçer Tulacı <sup>1</sup> , Sema Nur Türkoğlu Dikmen <sup>2</sup> .....	35
<b>0074 - Comparison of brain magnetic resonance imaging findings of bipolar disorder patients with the healthy control group</b> .....	<b>36</b>
Yaşar Kapıcı <sup>1</sup> , Olga Bayar Kapıcı <sup>2</sup> .....	36
<b>0081 - Artificial intelligence-based emotion analysis of Turkish Twitter messages in Autism Spectrum Disorders</b> .....	<b>38</b>
Miraç Barış Usta <sup>1</sup> , Volkan Oban <sup>2</sup> , Gül Dikeç <sup>3</sup> .....	38
<b>0082 - Eye traumas and attention deficit hyperactivity disorder in children</b> .....	<b>39</b>
Ali Karayağmurlu <sup>1</sup> , Ali Keleş <sup>2</sup> , Süleyman Korhan Karaman <sup>3</sup> .....	39

<b>0083 - Investigation of adolescents diagnosed with primary obesity in terms of internet and smartphone addiction, ADHD and other psychiatric comorbidities .....</b>	<b>40</b>
Gülnur Baş <sup>1</sup> , Ömer Kardeş <sup>2</sup> .....	40
<b>0092 - The Relationship between perceived stress, stress coping styles and eating behavior in obese candidates for bariatric surgery.....</b>	<b>41</b>
Mert Gözen, Betül Kurtseş Gürsoy .....	41
<b>0096 - Evaluation of adult psychiatrists' attitudes and approaches towards adult attention deficit hyperactivity disorder: A preliminary study .....</b>	<b>43</b>
Yavuz Yılmaz <sup>1</sup> , İlknur Ucuz <sup>2</sup> .....	43
<b>0098 - A mirror-image study in patients with schizophrenia spectrum disorders.....</b>	<b>44</b>
Esat Fahri Aydın <sup>1</sup> , Esra Merve Şahin <sup>2</sup> .....	44
<b>0099 - The Relationship between PTSD risk and relapse in patients with alcohol and substance use disorder .....</b>	<b>45</b>
Cavid Guliyev .....	45
<b>0102 - Dynamic thiol/disulfide homeostasis and other oxidative parameters in children with autism spectrum disorders .....</b>	<b>45</b>
Halenur Teke <sup>1</sup> , Fevziye Toros <sup>2</sup> .....	45
<b>0106 - Leptin, ghrelin, MCH, neurotensin and adiponectin levels in young children with autism spectrum disorder.....</b>	<b>46</b>
Necati Uzun <sup>1</sup> , Ayhan Bilgiç <sup>1</sup> , Hürşit Ferahkaya <sup>2</sup> , Dilek Özgül Katırcıoğlu <sup>1</sup> , İbrahim Kılınç <sup>1</sup> , Mehmet Burhan Oflaz <sup>1</sup> .....	46
<b>0108 - Two-Year retrospective evaluation of patients with obsessive compulsive disorder and follow-up results in a child psychiatry clinic .....</b>	<b>47</b>
Meryem Macit Efe, Miraç Barış Usta .....	47
<b>0109 - What is the role of youtube as a source of information on premenstrual syndrome? .....</b>	<b>48</b>
Merve Akkuş <sup>1</sup> , Onur Gökçen <sup>1</sup> , Fatih Akkuş <sup>2</sup> .....	48
<b>0112 - Investigation of complementary and alternative medicine applications in autism spectrum disorders .....</b>	<b>49</b>
Ayla Uzun Cicek <sup>1</sup> , İlknur Ucuz <sup>2</sup> .....	49
<b>0119 - Sociodemographic variables affecting postpartum depression symptoms: a preliminary study .</b>	<b>50</b>
Dilara Çirakman, Mehmet Öztürk.....	50
<b>0131 - Sluggish cognitive tempo symptoms in children and adolescents with mild autism: investigating associated individual and familial factors and comparing to children and adolescents with attention deficit hyperactivity disorder .....</b>	<b>51</b>
Nazan Ekinci <sup>1</sup> , Ozalp Ekinci <sup>2</sup> , İbrahim Adak <sup>2</sup> , Selin Ayşe İpek Baş <sup>3</sup> , Mohammad B Abdulrazzaq Al Bayati <sup>4</sup> ..	51
<b>0132 - The Relationship between smartphone use and sleep, body mass index, and quality of life .....</b>	<b>52</b>
Burcu Ersöz Alan <sup>1</sup> , Yusuf Selman Çelik <sup>1</sup> .....	52

<b>0142 - Psychopathy and its relation with borderline personality traits in women with substance use disorder</b> .....	<b>53</b>
Sercan Karabulut .....	53
<b>0148 - Association between biological rhythm and psychosocial functionality in patients with bipolar affective disorder type 1 and their healthy first degree relatives</b> .....	<b>54</b>
Ece Çulhacı, Aytül Karabekiroğlu, Ömer Böke, Ahmet Rifat Şahin, Hatice Güz, Gökhan Sarısoy, Selçuk Özdin .....	54
<b>0149 - The Relationship between perceived peer bullying and post-traumatic stress disorder symptoms in school-age children</b> .....	<b>55</b>
Büşra Bahadır <sup>1</sup> , Gencay Koç <sup>1</sup> , Zeynep Göker <sup>1</sup> , Esra Çöp <sup>1</sup> .....	55
<b>0150 - Factors related to job engagement in young physicians</b> .....	<b>56</b>
Hüseyin Şehit Burhan.....	56
<b>0154 - Anticipatory grief, anxiety and depression in caregivers of lung cancers patients</b> .....	<b>58</b>
İhsan Aksoy <sup>1</sup> , Rukiye Tekdemir <sup>1</sup> , Serdar Karakaya <sup>2</sup> .....	58
<b>0158 - Evaluation of socioeconomically disadvantaged adolescents hospitalized in the intensive care unit for suicide attempts</b> .....	<b>58</b>
Gökçen İlçioğlu Ekici <sup>1</sup> , Mehmet Semih Demirtaş <sup>2</sup> .....	58
<b>0159 - The Problematic smartphone use and related psychopathologies in adolescents</b> .....	<b>59</b>
Yusuf Selman Çelik <sup>1</sup> , Burcu Ersöz Alan <sup>1</sup> .....	59
<b>0160 - Dead man walking: Anticipatory grief among lung cancer patients</b> .....	<b>60</b>
Rukiye Tekdemir <sup>1</sup> , İhsan Aksoy <sup>1</sup> , Serdar Karakaya <sup>2</sup> .....	60
<b>0162 - The difference in the level of psychological stigmatisation between patients who applied to the alcohol and substance addiction research, treatment and training centre outpatient clinic and other psychiatry outpatient clinics</b> .....	<b>61</b>
Seda Kiraz, Ece Yazla Asafov.....	61
<b>0168 - Impact of attention-deficit/hyperactivity disorder comorbidity on phenomenology and treatment outcomes of pediatric obsessive-compulsive disorder</b> .....	<b>65</b>
Ayşegül Efe <sup>1</sup> , Duygu Kaba <sup>2</sup> , Merve Canlı <sup>1</sup> , Rahime Duygu Temeltürk <sup>3</sup> .....	65
<b>0169 - A Retrospective evaluation on demographic, phenomenological, and comorbidity features of pediatric obsessive-compulsive disorder</b> .....	<b>66</b>
Ayşegül Efe, Sadettin Burak Açikel, Sabide Duygu Uygun, Merve Canlı, Rahime Duygu Temeltürk, Yusuf Gürel, Miray Çetinkaya, Fatma Hülya Çakmak .....	66
<b>0174 - Predictability of depression by plasma low-grade inflammatory markers in the background of pediatric celiac disease</b> .....	<b>67</b>
Ayşegül Efe <sup>1</sup> , Ayşegül Tok <sup>2</sup> .....	67
<b>0175 - Obsessive-Compulsive symptomatology and disgust-propensity in disordered eating behaviors of adolescents with celiac disease</b> .....	<b>68</b>
Ayşegül Efe <sup>1</sup> , Ayşegül Tok <sup>2</sup> .....	68

<b>0176 - A Clinical investigation on ADHD-traits in childhood celiac disease.....</b>	<b>69</b>
Ayşegül Efe <sup>1</sup> , Ayşegül Tok <sup>2</sup> .....	69
<b>0186 - The Effect of child's attention deficit hyperactivity disorder symptoms on parenting styles and family functioning.....</b>	<b>70</b>
Mehmet Karadağ <sup>1</sup> , Gizem Yılmaz Saygılı <sup>1</sup> , Zehra Hangül <sup>1</sup> , Fatma Subaşı Turgut <sup>2</sup> .....	70
<b>0187 - Ambulatory pharmacotherapy of five psychiatric disorders in Bahrain: A descriptive study ....</b>	<b>71</b>
Yasin Tayem, Haitham Jahrami, Mazen Ali, Suhaib Hattab.....	71
<b>0189 - The Turkish validity and reliability study of work and social adjustment scale - youth and parent version (WSAS-Y/ WSAS-P) .....</b>	<b>72</b>
Gencay Koç <sup>1</sup> , Gülser Şenses Dinç <sup>2</sup> , Atilla Elhan <sup>3</sup> .....	72
<b>0193 - Psychometric properties of Turkish Orthorexia Nervosa Inventory in a clinical adolescent sample .....</b>	<b>73</b>
Bahadır Turan <sup>1</sup> , Selman Yıldırım <sup>1</sup> , Samiye Cilem Bilginer <sup>1</sup> , Mehmet Akif Akıncı <sup>2</sup> .....	73
<b>0198 - The Relationship between rumination, perceived stress and affective neuroscience personality scale.....</b>	<b>74</b>
Jamal Hasanlı <sup>1</sup> , Yasemin Hoşgören Alıcı <sup>1</sup> , Zehra Uçar Hasanlı <sup>2</sup> .....	74
<b>0209 - Examining children with sluggish cognitive tempo accompanying attention deficit hyperactivity disorder in terms of emotion regulation difficulties .....</b>	<b>81</b>
Meriç Meriçli, Saliha Baykal .....	81
<b>0210 - Evaluation of post-traumatic stress disorder symptoms and hope levels of Syrian refugee adolescents living in Turkey .....</b>	<b>83</b>
Ahmet Özaslan <sup>1</sup> , Murat Yıldırım <sup>2</sup> .....	83
<b>0223 - The Relationship of digital game addiction with ADHD symptoms and quality of life in middle school and high school years .....</b>	<b>84</b>
Uğur Tekin <sup>1</sup> , Orhan Kocaman <sup>2</sup> .....	84
<b>0227 - Thalamic volume changes in early-course schizophrenia patients receiving cognitive enhancement therapy .....</b>	<b>85</b>
Olçay Şenay <sup>1</sup> , Victor Zeng <sup>1</sup> , Rachal Hedge <sup>1</sup> , Shaun M. Eack <sup>2</sup> , Matcheri S. Keshavan <sup>1</sup> .....	85
<b>0231 - Retrospective evaluation of burnout, depression, anxiety, stress and psychological flexibility of caregivers for intellectual or mentally disabled care services in the Covid-19 pandemic after psychoeducation.....</b>	<b>86</b>
Şengül İlkay <sup>1</sup> , Sema Nur Türkoğlu Dikmen <sup>2</sup> .....	86
<b>0241 - Psychedelics and neuroplasticity: a systematic review unraveling the biological underpinnings of psychedelics.....</b>	<b>87</b>
Cato M.h De Vos <sup>1</sup> , Natasha L. Mason <sup>2</sup> , Kim P.c. Kuypers <sup>2</sup> .....	87
<b>0248 - Investigation of the relationship between intolerance of uncertainty and personality traits in a community sample.....</b>	<b>88</b>
Kübra Sezer Katar <sup>1</sup> , Ayşe Gökçen Gündoğmuş <sup>2</sup> .....	88

<b>Investigation of metacognitions and anxiety symptoms of coronary artery disease patients: a preliminary study</b> .....	<b>89</b>
Pınar Demir Gündoğmuş <sup>1</sup> , Ibrahim Gündoğmuş <sup>2</sup> .....	89
<b>0259 - Effects of covid-19 pandemic on anxiety and depression level in medical students</b> .....	<b>90</b>
Elmas Beyazyüz.....	90
<b>0264 - The Clinical importance of psychological flexibility in treatment response of patients with obsessive compulsive disorder</b> .....	<b>91</b>
Nisa Deveci, Mustafa Uğurlu, Ali Çayköylü .....	91
<b>0268 - The sociodemographic features, comorbid psychiatric diagnosis, and treatment of children diagnosed anxiety disorder: follow-up study</b> .....	<b>91</b>
Zeynep Vatansever Pınar .....	91
<b>0272 - Serum neurofilament light chain protein levels in children and adolescents with autism spectrum disorder</b> .....	<b>92</b>
Cansu Pınar Yavaş <sup>1</sup> , Mehmet Fatih Ceylan <sup>2</sup> , Selma Tural Hesapcioğlu <sup>2</sup> , Almıla Şenat <sup>3</sup> , Özcan Erel <sup>4</sup> .....	92
<b>0277 - Effects of electroconvulsive therapy (ECT) on hematologic parameters</b> .....	<b>93</b>
Sena Akpolat <sup>1</sup> , Zehra Gökkaya Kılıç <sup>2</sup> , Gülsüm Zuhul Kamış <sup>1</sup> , Esra Kabadayı Şahin <sup>2</sup> , Mustafa Uğurlu <sup>2</sup> .....	93
<b>0281 - Post-Traumatic stress/growth and resilience reactions of adolescents exposed to Elazig 2020 Earthquake and stayed in a container city: a preliminary report</b> .....	<b>94</b>
Elif Abanoz <sup>1</sup> , Bahadır Turan <sup>2</sup> , Onur Burak Dursun <sup>3</sup> .....	94
<b>0285 - The Relationship Between the frequency of hopelessness, depression and the levels of cognitive distortion in medical faculty students</b> .....	<b>95</b>
Nur Özge Akçam <sup>1</sup> , Nazan Dolapoğlu <sup>2</sup> .....	95
<b>0304 - The Effects of liraglutide on NLRP3 Inflammasome Activation and cognitive-behavioral changes in the lithium-pilocarpine-induced temporal lobe epilepsy model in rats</b> .....	<b>96</b>
Fatma Merve Antmen <sup>1</sup> , Zeynep Fedaioglu <sup>2</sup> , Dilan Acar <sup>1</sup> , Ahmed Kerem Sayar <sup>3</sup> , Lala Rezeyeva <sup>3</sup> , Bengisu Karaköse <sup>3</sup> , İlayda Esmâ Yavuz <sup>3</sup> , Ece Ada <sup>3</sup> , Simge Senay <sup>4</sup> , Güldal Süyen <sup>1</sup> , Devrim Özarslan <sup>5</sup> .....	96
<b>0305 - Eating behaviour and psychiatric comorbidities among bariatric surgery candidates</b> .....	<b>97</b>
Rümeysa Yeni Elbay, Fatma Nur Erol, Aynur Görmez.....	97
<b>0312 - Examination of psychiatric consultations requested from patients applying to the emergency department of a training and research hospital</b> .....	<b>97</b>
Özgür Maden.....	97
<b>0331 - Psychometric Properties of the Turkish Version of the Children's Saving Inventory in a Clinical Sample</b> .....	<b>98</b>
Mehmet Akif Akıncı <sup>1</sup> , Bahadır Turan <sup>2</sup> , Ali Çakır <sup>3</sup> , Ibrahim Selçuk Esin <sup>4</sup> , Eric Alan Storch <sup>5</sup> , Onur Burak Dursun <sup>6</sup> .....	99
<b>0332 - Evaluation of subclinical cardiovascular risk in drug-naive pediatric patients with anxiety disorders</b> .....	<b>99</b>
Mehmet Akif Akıncı <sup>1</sup> , Necati Uzun <sup>2</sup> , Hayrullah Alp <sup>3</sup> .....	99

<b>0333 - Investigation of the effects of ODD comorbidity on internalization and externalization symptoms in children with ADHD .....</b>	<b>100</b>
Mehmet Akif Akıncı <sup>1</sup> , Bahadır Turan <sup>2</sup> , Esen Yıldırım Demirdöğen <sup>1</sup> .....	100
<b>0337 - Evaluation of personality and cognitive traits in individuals with panic disorder: comparison of clinical and healthy groups.....</b>	<b>101</b>
Erkan Kuru <sup>1</sup> , Ilker Özdemir <sup>2</sup> .....	101
Büşra Öz <sup>1</sup> , Işıl Kayı <sup>1</sup> , Merve Alpay <sup>2</sup> .....	102
<b>Poster Research Presentations .....</b>	<b>105</b>
<b>0026 - Psychotic symptoms in 14-years-old adolescent boy with intellectual disability.....</b>	<b>106</b>
Nihal Serdengeçti, Zehra Koyuncu.....	106
<b>0040 - A Severe arfid case after aspiration with food: The Importance of multidisciplinary intervention .....</b>	<b>107</b>
Büşra Bahadır, Özge Parlak Gözükar, Elif Akçay, Esra Çöp .....	107
<b>0047 - PANDAS with rheumatic carditis: A Case report .....</b>	<b>109</b>
Halenur Teke <sup>1</sup> , Perinur Kalafat <sup>1</sup> , Ayhan Kılıç <sup>2</sup> , Mehmet Ayhan Cöngöloğlu <sup>1</sup> .....	109
<b>0048 - Management of a severe OCD case in the day clinic .....</b>	<b>110</b>
Müjdat Erarkadaş, Burcu Kardeş, Nursu Çakın Memik .....	110
<b>0052 - Postpartum depression risk factors.....</b>	<b>111</b>
Elif Karaahmet <sup>1</sup> , Ayşe Nur Çakır Güngör <sup>2</sup> , Feridun Bülbül <sup>3</sup> .....	111
<b>0064 - Eczematous eruption induced by long acting form of aripiprazole.....</b>	<b>112</b>
Zehra Kabakçı <sup>1</sup> , Özlem Bursalıoğlu <sup>1</sup> , Güliz Şenormancı <sup>1</sup> , Ömer Şenormancı <sup>2</sup> .....	112
<b>0065 - Hypokalemia with olanzapine at the therapeutic dose .....</b>	<b>114</b>
Özlem Bursalıoğlu <sup>1</sup> , Zehra Kabakçı <sup>1</sup> , Güliz Şenormancı <sup>1</sup> , Ömer Şenormancı <sup>2</sup> .....	114
<b>0068 - Mirtazapine-Associated urinary retention.....</b>	<b>115</b>
Ahmet Faruk Nursaçan, Erdoğan Akça .....	115
<b>0080 - A Case of atrial flutter concurrent with aripiprazole injection: is rhythm disorder cause or consequence? .....</b>	<b>116</b>
Özgen Özçelik .....	116
<b>0085 - Central pontine myelinolysis as a complication of refeeding syndrome in a patient with anorexia nervosa .....</b>	<b>117</b>
Büşra Ergüt, Erdoğan Akça.....	117
<b>0087 - In Vitro (Imaginary Exposure) and In vivo (Home Visit) combining CBT for an adolescent with obsessive-compulsive disorder.....</b>	<b>118</b>
Tuncay Sandıkçı, Barika Mercan, Mahmut Cem Tarakçıoğlu .....	118
<b>0090 - Management of lamotrigine associated skin rashes in an adolescent girl with autism .....</b>	<b>120</b>
Ali Karayağmurlu, Zeynep Kübra Bingöl.....	120



<b>0093 - Auditory-Focused distractor continuous performance test (ad-CPT): A New objective diagnostic tool developed for attention deficit hyperactivity disorder (ADHD).....</b>	<b>120</b>
Ahmet Özaslan <sup>1</sup> , Mehmet Sevri <sup>2</sup> , Elvan Işeri <sup>1</sup> , Barış Karacan <sup>3</sup> , Mehmet Cengiz <sup>4</sup> , Esin Gökçe Sarıpınar <sup>1</sup> , Asiye Uğraş Dikmen <sup>5</sup> , Hacer Karacan <sup>6</sup> , Esra Güney <sup>1</sup> .....	
	120
<b>0094 - Hypersomnolence related with internal cerebral vein thrombosis and treated with modafinil: A Case report .....</b>	<b>121</b>
Büşra SÖYLEMEZ KARAKUŞ <sup>1,2</sup> , Fatih YIĞMAN <sup>1</sup> .....	
	121
<b>0101 - Prefrontal lobe syndrome in a patient with intracranial migration of a gravitational bullet: A Case report.....</b>	<b>123</b>
Nur Adam Mohamed <sup>1</sup> , Yusuf Abdirisak Mohamed <sup>1</sup> , Mehmet Kaan Ungoren <sup>2</sup> , Samet Kose <sup>1</sup> .....	
	123
<b>0103 - Absence epilepsy or sluggish cognitive tempo? A case report .....</b>	<b>124</b>
Şule Aydın, Esra Demirci, Sevgi Özmen.....	
	124
<b>0110 - Risperidone induced cholestasis .....</b>	<b>125</b>
Elif Ozge Aktas, Ozen Onen Sertoş .....	
	125
<b>0114 - A Case of lithium moxidation presenting with parkinsonism .....</b>	<b>125</b>
Zakire Kübra Aksoy, Nazmiye Kaya .....	
	125
<b>0115 - Management of antipsychotic-induced hyperprolactinemia .....</b>	<b>127</b>
Zeynep Gültekin Taş, Uğur Karabağ, Adem Güneş, Gül Karacetin .....	
	127
<b>0117 - Obesity and suicide attempt after internet gaming disorder.....</b>	<b>128</b>
Ugur Karabag, Zeynep Gultekin Tas, Mehmet Tekden, Adem Gunes, Gul Karacetin .....	
	128
<b>0120 - A Case of pitt-hopkins syndrome: psychopharmacological approach for anxiety, insomnia and agitation .....</b>	<b>129</b>
Cemre Istanbulu, Binay Kayan Ocakoğlu, Gül Karacetin .....	
	129
<b>0122 - Alterations of appetite hormones in risperidone treated children and adolescents: Post hoc analysis of the SPACe study.....</b>	<b>130</b>
Izgi Bayraktar <sup>1</sup> , J. Liang <sup>2</sup> , S.M. Kloosterboer <sup>2,3</sup> , M.H.J. Hillegers <sup>3</sup> , B.C.M. de Winter <sup>2,4</sup> , B.C.P. Koch <sup>2,4</sup> , B. Dierckx <sup>3</sup> , S.A.A. van den Berg <sup>5</sup> and, R.A. Hermans <sup>2,3</sup> .....	
	130
<b>0123 - A 6-Year-Old boy who is a victim of incest: The Role of psychodynamic play therapy .....</b>	<b>131</b>
Meryem Seçen Yazıcı, Zehra Koyuncu .....	
	131
<b>0133 - Early side effects after COVID-19 vaccine in children and adolescents with psychiatric disorders .....</b>	<b>131</b>
Seda Kafalı, Selma Tural Hesapçioğlu, Dilan Aydın Ayva, Duygu Aslantaş, Mehmet Fatih Ceylan.....	
	131
<b>0144 - Causal or incidental co-occurrence in adolescence; Occipital bending and psychosis .....</b>	<b>132</b>
Utku Kaçmaz, Nagihan Cevher Binici .....	
	132
<b>0152 - Angel’s trumpet as an addictive substance: Case report and literature review.....</b>	<b>133</b>
Yusuf Dökmen, Esra Güneysu, Mehmet Akif Suda, Atila Erol .....	
	133

<b>0153 - DHEA-S may be related to male bias in ASD? .....</b>	<b>134</b>
Şeyda Çelik Göksoy <sup>1</sup> , Ali Karayağmurlu <sup>2</sup> .....	134
<b>0170 - SARS-CoV-2/COVID-19 associated pediatric acute-onset neuropsychiatric syndrome: A Case report of female twin adolescents .....</b>	<b>135</b>
Ayşegül Efe .....	135
<b>0171 - Myasthenia gravis and periventricular nodular heterotopia in neuropsychiatric frame; Case report of a female adolescent.....</b>	<b>135</b>
Ayşegül Efe .....	135
<b>0172 - Turkish adaptation of the executive functions and occupational routines scale (EFORTS) and its validity and reliability in children with dyslexia .....</b>	<b>136</b>
Gökçen Akyürek <sup>1</sup> , Ayşegül Efe <sup>2</sup> , Gonca Bumin <sup>1</sup> .....	136
<b>0173 - The Effect of play and competition-based cognitive therapy on executive functions and occupational routines in children with dyslexia: Double randomised controlled trial .....</b>	<b>138</b>
Gökçen Akyürek <sup>1</sup> , Ayşegül Efe <sup>2</sup> , Erdem Karabulut <sup>3</sup> , Gonca Bumin <sup>1</sup> , Birim Günay Kılıç <sup>4</sup> .....	138
<b>0178 - Can fluoxetine treatment be effective in a 6-year-old child with selective mutism with sensory processing disorder? .....</b>	<b>139</b>
Mustafa Balkanas, Mahmut Cem Tarakçıoğlu.....	139
<b>0182 - Comorbid depression treatment with fluoxetine in a 6-year-old boy with autism spectrum disorder .....</b>	<b>140</b>
Aybike Aydın, Gizem Durcan .....	140
<b>0184 - Maintenance electroconvulsive therapy for agitation in autism spectrum disorder .....</b>	<b>141</b>
Zeynep Gültekin Taş, Uğur Karabağ, Gül Karaçetin .....	141
<b>0185 - Parietal lobe atrophy in very late-onset schizophrenia.....</b>	<b>142</b>
Gizem Ayşe Çelik, Erdoğan Akça, Beliz Özen, Ayşe Sakallı Kani .....	142
<b>0190 - Cabergoline-Induced manic episode with psychotic feature in an adolescent case.....</b>	<b>143</b>
Ayşe Sena Yüksel, Omca Güney, Esra Aydın, Binay Kayan Ocakoğlu, Gül Karaçetin .....	143
<b>0199 - The lithium use during covid infection by pediatric population: case series.....</b>	<b>143</b>
Melike Sarı, Seda Kanoğlu Yüksekaya, Selma Tural Hesapçıoğlu, Mehmet Fatih Ceylan.....	143
<b>0203 - Electro-convulsive therapy induced hypomania: A Case report.....</b>	<b>144</b>
Gizem Ayşe Çelik, Beliz Özen, Erdoğan Akça.....	144
<b>0206 - The Role of metacognition in the emergence of anger and aggression in patients with alcohol use disorder .....</b>	<b>145</b>
Neslihan Kara <sup>1</sup> , Ahmet Ataoğlu <sup>2</sup> .....	145
<b>0214 - Clozapine induced myocarditis development in the late period: A Case report.....</b>	<b>146</b>
Halil İbrahim Eren <sup>1</sup> , Zeynep Teke <sup>1</sup> , Mesut Yıldız <sup>1</sup> .....	146

<b>0215 - Can in vivo exposure be effective in the first session of an 8-year-old child with intense anxiety triggered by Covid 19? .....</b>	<b>147</b>
Ayşe Elif Söylemezoğlu, Mahmut Cem Tarakçıoğlu .....	147
<b>0216 - Maintenance ECT in treatment-resistant depression: a case report.....</b>	<b>148</b>
Esat Soylu, Ayşe Sakallı Kani, Mesut Yıldız .....	148
<b>0226 - Efficacy of twenty sessions of rTMS applied to motor cortex in tardive dyskinesia: 6-month follow-up case report .....</b>	<b>149</b>
Nilifer Gürbüzer .....	149
<b>0228 - Factitious disorder in child and adolescent alcohol and drug addiction treatment and research centre; a case report .....</b>	<b>150</b>
Secil Fatma Agdere, Meriç Menekşeli, Mehmet Tekden, Gül Karaçetin.....	150
<b>0230 - Aripiprazole treatment in clozapine-related obsessive-compulsive symptoms in a child with very early-onset schizophrenia .....</b>	<b>151</b>
Merve Cesur Gelmiş, Ayşe Sena Yüksel, Ayça Atay Bedel, Binay Kayan Ocakoğlu, Gül Karaçetin .....	151
<b>0249 - Immunotherapy in autism spectrum disorder; A Case series .....</b>	<b>151</b>
Secil Fatma Agdere <sup>1</sup> , Pinar Topaloglu <sup>2</sup> , Mehmet Can Erata <sup>1</sup> , Gül Karaçetin <sup>1</sup> , Zuhale Yapici <sup>2</sup> .....	151
<b>0255 - A Patient who attempted suicide with a lethal overdose of venlafaxine and survived without sequelae.....</b>	<b>152</b>
Jamal Hasanlı <sup>1</sup> , Mehmet Akif Kara <sup>2</sup> , Zehra Uçar Hasanlı <sup>2</sup> .....	152
<b>0257 - Body dysmorphic disorder: Case series .....</b>	<b>153</b>
Fadime Şimşek <sup>1</sup> , Eda Yakut <sup>2</sup> .....	153
<b>0261 - Atomoxetine-induced erythematous papular rash.....</b>	<b>154</b>
Beyza Nur Sandıkçı, Ceren Tosun, Gizem Durcan.....	154
<b>0265 - Treatment of aggression with topiramate in a 10-year-old girl with mild intellectual disability.....</b>	<b>157</b>
Betül Kırilangıç, Büşra Zengin, Mahmut Cem Tarakçıoğlu .....	157
<b>0269 - Catatonia related to medical conditions: A Case study .....</b>	<b>158</b>
Kaan Keskin, Mehmet Cagdas Eker.....	158
<b>0270 - Acute psychotic symptoms associated in vitro fertilization procedure: A Case report .....</b>	<b>158</b>
Elif Ozge Aktas, Mehmet Cagdas Eker .....	158
<b>0271 - Mania and seasonality as grief reaction .....</b>	<b>159</b>
Yunus Akkeçili, Turta Sig, Hayriye Elbi .....	159
<b>0296 - Trends in the overlap of rare diseases and psychopharmacology: Sotos syndrome with orofacial dyskinesia.....</b>	<b>160</b>
Züleyha Tehinoğlu, Samiye Çilem Bilginer, Bahadır Turan.....	160
<b>0335 - Association of monosomy 1p36 syndrome and autism spectrum disorder: A Case report .....</b>	<b>161</b>
Büşra Öz, Işıl Kayı.....	161

<b>0336 - Erection after misophonia in a pediatric patient: A Case report .....</b>	<b>161</b>
Şeyma Özge Kaban, Büşra Öz .....	161
<b>0338 - Coexistence of vitiligo and down syndrome: A Case report .....</b>	<b>162</b>
Büşra Öz <sup>1</sup> , Işıl Kayı <sup>1</sup> , Dilşad Yıldız Miniksar <sup>2</sup> .....	162
<b>0343 - Serotonin syndrome in a patient taking clomipramine and paroxetine concomitantly: A Case report. ....</b>	<b>163</b>
Yasin Çalışkan .....	163

## **Oral Research Presentations**

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13th International Congress on Psychopharmacology &  
9th International Symposium on Child and Adolescent Psychopharmacology

[Abstract:0011] [Psychosomatic medicine- Liaison psychiatry]

**0011 - Screening of psychiatric symptoms in patients with insulin resistance**

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**OBJECTIVE:** Insulin resistance is a condition that develops as a result of insulin receptors in tissues not responding adequately to insulin. Its etiology has not been fully elucidated. The causes of insulin resistance include genetics, weight gain, metabolic disorders, malnutrition and sedentary life [1,2]. Recently, it has been reported that the incidence of psychiatric symptoms such as depressive and anxiety has increased in patients with insulin resistance [3]. In our study, we aimed to screen for psychiatric symptoms in patients with insulin resistance.

**METHODS:** Fifty patients, 18–65 years old, who applied to the endocrine outpatient clinic were included in the study. Patients with a value of 2.5 and above calculated with the HOMA-IR (Homeostasis Model Assessment of Insulin Resistance) formula were considered as patients with insulin resistance and included in the study. Patients who use drugs, have a chronic disease, a diagnosis of psychiatric disease and use psychotropic drugs were not included in the study. Sociodemographic data form and The Symptom Checklist-90 (SCL90) were applied to the patients. Study was approved by the Non Interventional Clinical Research Ethics Committee of Recep Tayyip Erdogan University Faculty of Medicine.

**RESULTS:** The mean age in the patient group was 39.02±11.8. 38 of the patients were female and 12 were male (table.1). SCL-90 scale scores somatization 1.28±0.79; anxiety 1.08±0.68; obsession 1.26±0.76; depression 1.23±0.9; interpersonal sensitivity 1.1±1.05; psychotic 0.38±0.62; paranoid 0.78±0.75; anger 1.08±1.01; phobic 0.31±0.51; the overall symptom score is 1.01±0.64 (table.2). All scale mean subscores and overall total scores are significantly higher in females than males (p=0.001). There was no significant difference in scale scores between marital status and occupational groups (p=0.52) (table.3).

**CONCLUSIONS:** In our study, the highest mean scores were obtained from the somatization subscale. In addition, it is noteworthy that the mean scores of the obsession, depression, interpersonal sensitivity, anxiety and anger subscales are above the cut-off score. The phobic, paranoid and psychotic subscale mean scores are below the cut-off score. The fact that the general symptom score was determined to be 1.01, which is above the cut-off score, supports the results of studies conducted on the subject in recent years [4,5]. Considering the effects of insulin on the central nervous system, more research is needed on this subject.

**Keywords:** Insulin, Insulin Resistance, Mental Disorders, Psychiatry

Table.1. Sociodemographic Data of Patients

	Min	Max	mean.
Age	18	63	39,02
	n	%	
<b>Gender</b>			
<b>Female</b>	38	76,0	
<b>Male</b>	12	24,0	
<b>Occupation</b>			
<b>Unemployed</b>	27	54,0	
<b>officer</b>	7	14,0	
<b>Employee</b>	12	24,0	
<b>Student</b>	4	8,0	
<b>Marital Status</b>			
<b>Married</b>	36	72,0	
<b>Single</b>	10	20,0	
<b>Divorced</b>	4	8,0	
<b>Total</b>	50	100,0	

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**[Abstract:0013] [Addiction Psychiatry]****0013 - Do peer problems mediate the association between sluggish cognitive tempo and gaming disorder?**

Nuran Gözpinar

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**OBJECTIVE:** Gaming Disorder (GD) is among the behavioral addictions and is characterized by presence of unsuccessful attempts to control gaming activity, loss of interest in hobbies, and impaired functionality. Sluggish Cognitive Tempo (SCT) is characterized by clinical symptoms such as daydreaming, difficulty in staying awake, and low energy. Although the intelligence capacity of children with SCT symptoms is normal, their social adaptation skills are quite poor. It is already known that social difficulties are a risk factor for GD. Identifying risky individuals

and mediating factors are important for preventive mental health. Therefore, it was aimed to investigate the relationship between SCT and GD and the mediating effect of peer problems.

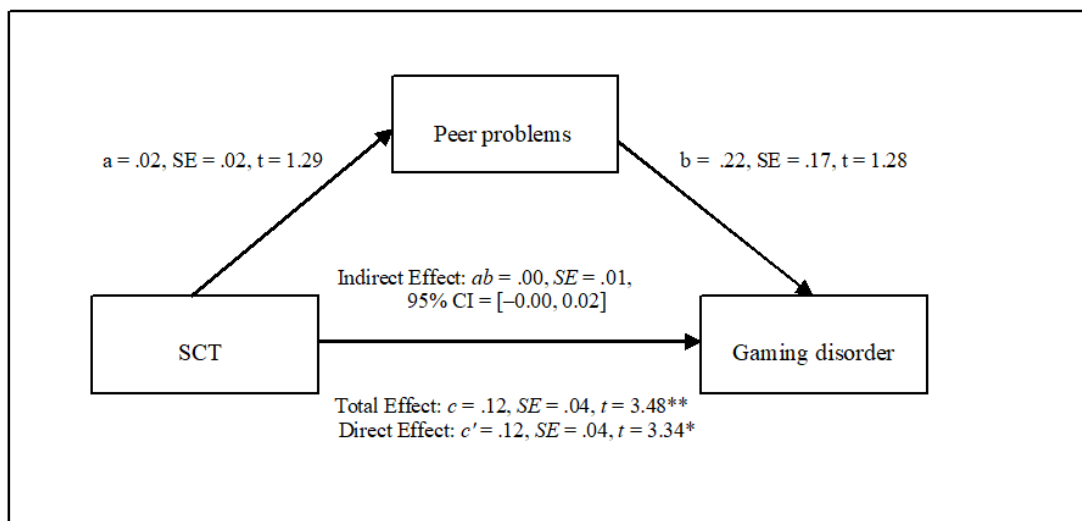
**METHODS:** 174 children and adolescents participated in the study. Data were obtained via Sociodemographic Data Form, Gaming Disorder Scale, Strengths and Difficulties Questionnaire, Turgay DSM-IV Disruptive Behavior Disorders Rating Scale-Parent form (T-DSM-IV-S) and Sluggish Cognitive Tempo Scale and analyzed with the IBM SPSS package program.

**RESULTS:** The mean scores of GD scale of the male and female participants were  $8.14 \pm 4.63$  and  $10.22 \pm 4.18$ , respectively ( $p < 0.001$ ). Variables significantly correlated with GD were determined as ADHD-inattention ( $r = 0.523$ ), ADHD-hyperactivity/impulsivity ( $r = 0.266$ ), SDQ-emotional problems ( $r = 0.161$ ) and SCT ( $r = 0.294$ ). In the model which is created to examine the mediator effect of peer problems in the relationship between SCT and GD, while the total and direct effect was significant, the indirect (mediator) effect was found to be insignificant (Figure 1).

**CONCLUSIONS:** Firstly, it was shown that SCT was significantly correlated with GD. In the second stage, the mediating effect of peer problems in the relationship between SCT and GD was examined and it was found that SCT was related to GD above and beyond peer problems.

**Keywords:** correlation, gaming disorder, mediator effect, peer problems, sluggish cognitive tempo

**Figure 1**



*Indirect effect model of SCT predicting gaming disorder via peer problems. Note. Unstandardized coefficients shown. SCT = sluggish cognitive tempo; CI = confidence interval; N = 174. \* $p < .05$ . \*\* $p < .01$ .*



[Abstract:0015] [Others]

**0015 - Children and adolescents with family and in institutional care: assessment of attachment styles and theory of mind skills**

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**OBJECTIVE:** Attachment is defined as an emotional bond with consistency and continuity, which manifests itself with the child's search for intimacy with the caregiver, in the relationship that develops between the child and the primary caregiver. One cognitive ability that is particularly likely to be associated with attachment is 'theory of mind'. In the current study, we compared institutional care children staying in Children's Homes Coordination Center Directorate because of fixed caregivers and children staying with their family. We planned to determine children's attachment styles and evaluate its relationship with theory of mind skills.

**METHOD:** In the current study, 54 children staying Children's Homes Coordination Center Directorate (institutional care group), 33 children staying with their families and receive education in a private educational institution (family group), 34 children staying with their families and applied to the Child and Adolescent Psychiatry outpatient clinic (outpatient clinic group) were included. Children and adolescents participating in the study were administered Reading The Mind in the Eyes test and Faux Pas test to evaluate their theory of mind skills, and the Relationship Scales Questionnaire to determine their attachment style.

**RESULTS:** The frequency of secure attachment was 27.3%, 22.2% and 5.9% in the family group; institutional care group; outpatient clinic group, respectively. A significant difference was found between the family group and the outpatient clinic group ( $p=0.011$ ). Sixty-eight percent of the outpatient clinic group received a psychiatric diagnosis (most commonly Anxiety Disorder (18%) and Depressive Disorder (18%). Secure attachment rate in girls (14%) was found to be lower than boys (31.4%) ( $p=0.040$ ). Most common attachment style was anxious attachment (36.4%) among children staying in institutional care due to sexual abuse and avoidant attachment (55.6%) among those who stayed in the institution without any reason for abuse ( $p=0.018$ ).

**CONCLUSION:** It should be considered once again before saying that the rate of insecure attachment is higher for children in institutional care compared to children staying with families. In the current study, we have seen how important the form of institutional care for the child is. It is a considerable finding that the children staying in Children's Homes Coordination Center Directorate, where there are fixed caregivers in each house, have a secure attachment rate close to the children staying with their families. In addition, insecure attachment was higher found in children who applied to psychiatry outpatient clinics, which is another remarkable finding in the current study.

**Keywords:** attachment style, theory of mind, secure attachment

**[Abstract:0019] [Attention deficit hyperactivity disorder (ADHD)]****0019 - The association between attention deficit hyperactivity disorder and pathological internet use among adolescents**Songül Derin<sup>1</sup>, Özge Ünal<sup>2</sup>, Saliha Busra Selman<sup>3</sup><sup>1</sup>Bezmialem Vakıf University, Department of Child and Adolescent Psychiatry, Istanbul, Turkey.<sup>2</sup>Bezmialem Vakıf University, Faculty of Medicine, Istanbul, Turkey.<sup>3</sup>Department of Human Development & Family Studies, University of Wisconsin-Madison, Wisconsin, USA.**OBJECTIVE:** The objective of this study was to examine the relationship between Attention Deficit-Hyperactivity/Impulsivity (ADHD) symptoms and pathological Internet use (PIU) in adolescents.**METHODS:** Participants were 80 adolescents (M = 14.4 years, SD = 2.06), ranging in age from 11 to 17 and 44% (N = 35) were female. Adolescents' pathological internet use was assessed by self-report Young's Internet Addiction Scale (YIA), and ADHD symptoms were evaluated by Conners Parent Rating Scale-Revised Short (CPRS-RS).**RESULTS:** Regression analysis indicated that the difference for PIU symptoms in adolescents with ADHD and non-ADHD group was statistically significant (B = -0.39, p < 0.05), after controlling socioeconomic status. Compared with non-ADHD group, adolescents with ADHD were more likely to report PIU symptoms.**CONCLUSION:** These results suggest that PIU is associated with symptoms of ADHD in adolescents. It seems imperative to watch out for risk of possible pathological Internet use in adolescents with ADHD.**Keywords:** Attention Deficit Hyperactivity Disorder (ADHD), Pathological Internet Use (PIU), Adolescent**Table-1:**

Age	13.1 (1.95)	15.7 (1.15)	14.4 (2.06)
Mean (SD)	[11.0, 17.0]	[12.0, 17.0]	[11.0, 17.0]
Gender			
1	13 (33.3%)	22 (53.7%)	35 (43.8%)
2	26 (66.7%)	19 (46.3%)	45 (56.3%)
Socioeconomic Status			
Mean (SD)	2.92 (1.18)	4.34 (0.88)	3.65 (1.25)
Conners Total			
Mean (SD)	2.00 (0)	1.22 (0.42)	1.60 (0.49)
Young Total			
Mean (SD)	1.59 (0.59)	1.32 (0.56)	1.45 (0.59)

*Table 1. Demographic characteristics and summary statistics.*

[Abstract:0020] [Others]

**0020 - Neurocognitive functions and behavior outcome of preschool-age children with a history of febrile convulsions**

Nuran Gözpinar<sup>1</sup>, Bilgihan Bıkmazer<sup>2</sup>, Oğuzhan Koyuncu<sup>1</sup>, Aigiun Guseinova<sup>1</sup>, Ferit Durankuş<sup>3</sup>, Elif Yüksel Karatoprak<sup>4</sup>, Nilüfer Eldeş Hacıfazlıoğlu<sup>2</sup>, Alperen Bıkmazer<sup>1</sup>, Vahdet Görmez<sup>1</sup>

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**OBJECTIVES:** The current case-control study was aimed to ascertain whether febrile convulsion (FC) in early childhood is associated with neurocognitive deficits and in school age.

**METHODS:** Demographic, perinatal and febrile convulsion related data were collected from 91 children aged 3-6 years with a history of FC and 74 healthy control children. Sluggish Cognitive Tempo (SCT) Scale, Conners Parent Rating Scale-Revised Long Form (CPRS-RL), Childhood Executive Functioning Inventory (CHEXI) were completed by parents.

**RESULTS:** There was no significant difference between slow, sleepy and total scores of the SCT scale and defiant, cognitive problems-inattentiveness, hyperactivity, anxiety and perfectionism subscale scores of CPRS-RL between the two groups. SCT daydreamer, CPRS-RL social problem and psychosomatic subscale scores were higher in the control group ( $p=0.034$ ,  $p=0.012$  and  $p=0.002$ , respectively). CHEXI Executive Functioning Total score was higher in the FC group ( $p=0.005$ ).

**DISCUSSION:** This case control study suggested that FC history in early childhood does not have adverse effects on attention and behavior. The findings of this study also emphasized that there may be problems with executive functions in children with a history of febrile convulsions and the importance of behavioral and cognitive assessment in these children.

**Keywords:** Febrile Convulsion, Behaviour, Sluggish Cognitive Tempo

[Abstract:0024] [Attention deficit hyperactivity disorder (ADHD)]

**0024 - Comparison of the screen time of children with attention deficit hyperactivity disorder and healthy controls during the pandemic period**

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**OBJECTIVE:** Due to the covid-19 pandemic, many restrictions have been introduced all over the world, such as closing schools, curfews, and stopping social activities. The transition to distance learning has forced children to be exposed to the screen. Many studies have shown that internet use and screen exposure of both healthy children and children with psychiatric disorders such as attention deficit hyperactivity disorder (ADHD) increase during the pandemic period. The aim of this study is to compare the screen time of children with ADHD and healthy controls.

**METHOD:** Thirty-five children with ADHD who applied to our outpatient clinic and thirty-five children without any psychopathology were included in the study. Sociodemographic and screen time data of the patients were recorded during the interview. Ethics committee approval was received from Adana City Training and Research Hospital clinical trials ethics committee (No: 2021/1515).

**RESULTS:** ADHD group consisted of 13 (37.1%) girls and 22 (62.9%) boys, mean age was  $11.17 \pm 2.84$  years. The control group consisted of 15 (40%) girls and 20 (60%) boys, mean age was  $11.11 \pm 1.51$ . There was a statistically insignificant increase in daily television viewing time in the ADHD group during the pandemic period (mean:  $2.314 \pm 2.040$  hours) compared to the pre-pandemic period (mean:  $1.943 \pm 1.885$  hours) ( $p=0.305$ ). In the control group, there was a significant increase in daily television viewing times during the pandemic period (mean:  $2.357 \pm 1.546$  hours) compared to the pre-pandemic period (mean:  $1.314 \pm 0.582$  hours) ( $p < 0.0001$ ). During the pandemic period, the difference between the groups in terms of daily television viewing time was not statistically significant ( $p=0.671$ ). When evaluated in terms of daily internet use, there was a statistically insignificant increase in the ADHD group during the pandemic (mean:  $2.729 \pm 2.787$  hours) compared to the pre-pandemic period (mean:  $1.929 \pm 1.9858$  hours) ( $p=0.186$ ). In the control group, there was a significant increase in daily internet use during the pandemic period (mean:  $3.300 \pm 2.626$  hours) compared to the pre-pandemic period (mean:  $1.814 \pm 1.249$  hours) ( $p=0.002$ ). The difference between the groups in terms of daily internet use during the pandemic period was not statistically significant ( $p=0.162$ ).

**CONCLUSION:** In the literature, there are many studies showing that both ADHD and healthy children watch more television and spend more time on the internet during the pandemic period than in the pre-pandemic period. However, there are no studies involving children with ADHD and healthy controls. In our study, although there was no statistically significant difference between the groups in terms of both television viewing time and internet use, the average screen time was found to be higher in the control group. Studies with larger samples are needed to detect changes specific to children with ADHD.

**Keywords:** Covid-19, attention deficit and hyperactivity disorder, internet, television, child.

[Abstract:0027] [Others]

**0027 - The Relationship between inflammatory parameters and diagnoses of inpatients in the child and adolescent psychiatry service**

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**OBJECTIVE:** In recent years, there are promising studies examining the relationship between psychiatric disorders and hematological and immune system parameters. Studies have shown a relationship between elevated inflammatory biomarkers and psychiatric disorders. The aim of this study is to examine the relationship between inflammatory parameters and psychiatric diagnoses of patients admitted to the child and adolescent psychiatry service with various diagnoses from a broad perspective.

**METHODS:** Hematological parameters of the patients followed in Pamukkale University Child and Adolescent Psychiatry Inpatient Service between January 2015 and February 2022 were retrospectively analyzed. In this study, parameters obtained from Complete Blood Count (CBC) (Hemoglobin, White Blood Cell Count, Mean Platelet Volume (MPV), Red Cell Distribution Width (RDW)) and inflammatory markers calculated from these parameters (Neutrophil/Lymphocyte Ratio (NLR), Platelet/Lymphocyte Ratio (PLR), Monocyte/Lymphocyte Ratio (MLR), Systemic Immune-Inflammation Index) was used. All statistical analyses were performed using SPSS 25.0 (IBM SPSS Statistics 25 software (Armonk, NY: IBM Corp.)) software. Continuous variables were defined by the mean  $\pm$  standard deviation and categorical variables were defined by number and percent. Logistic regression analysis was used for determining the risk factors for psychiatric disorders. Statistical significance was determined as  $p \leq 0.05$ .

**RESULTS:** In the study in which 385 children and adolescents were evaluated, 63.1% of the cases were female and the mean age of the cases was  $14.34 \pm 2.46$  (min-max: 5-17). When the relationship between diagnoses and inflammatory parameters is examined; high hemoglobin levels are associated with low risk for depressive disorder, high RDW is associated with high risk in cases of post-traumatic stress disorder, conduct disorder and prepsychotic stage, high MPV values are associated with high risk in somatization disorder, conversion disorder and anorexia nervosa, high MLR levels were found to be associated with higher risk in bipolar disorder. No significant correlation was found between anxiety disorder, attention deficit hyperactivity disorder, autism spectrum disorder, dissociative disorder, specific learning disorder, schizoaffective disorder, bulimia nervosa, intellectual disabilities and the inflammatory parameters examined.

**CONCLUSION:** Our results indicated that inflammatory dysregulation may have a role in psychopathology in children and adolescents. In the literature, there is no similar study conducted in the child and adolescent psychiatry inpatient service. In the study; investigation of the relationship between psychiatric disorders and inflammation with parameters obtained by CBC which is an easy, simple and inexpensive test, will guide new studies in this field with children and adolescents.

**Keywords:** CBC, inflammation, psychiatry, child, adolescent

**[Abstract:0041] [Autism Spectrum Disorders]**

**0041 - Evaluation of c-reactive protein and procalcitonin levels in patients with autism spectrum disorder and attention deficit hyperactivity disorder**

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**INTRODUCTION:** Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) are common neurodevelopmental diseases of childhood. Inflammation plays a role in the etiopathogenesis of both disorders. Procalcitonin (PCT) and C-reactive protein (CRP) are acute phase reactants and increase in the presence of inflammation. In this study, it was aimed to show the role of inflammation in the etiology of ASD and ADHD, its relationship with other inflammation parameters, whether there is a relationship between PCT and CRP levels and symptom severity, and to elucidate the etiopathogenesis.

**MATERIALS-METHODS:** Sociodemographic data form was applied to the control and patient groups, DSM-IV-Based Screening and Evaluation Scale for Conduct Disorders in Children and Adolescents were applied to ADHD patients and Childhood Autism Rating Scale (CARS) were applied to ASD patients. CRP, hemogram parameters and PCT levels were measured in patients aged 5-15 years with ASD (n= 33) and ADHD (n= 36). A control group was formed from the subjects who were administered K-SADS and were not diagnosed with any DSM-5.

**RESULTS:** The study consisted of 33 ASD, 36 ADHD and 31 control groups. PCT and CRP values were found to be statistically significantly higher in ASD and ADHD patients compared to healthy controls ( $p < 0.05$ ). PCT and CRP values were found to be positively correlated ( $r: 0.358; p < 0.001$ ). No significant correlations were found between disease severity scale scores and PCT and CRP values. No association of diseases with other inflammatory parameters was observed.

**CONCLUSION:** As a result of this study, it can be thought that inflammation plays a role in the etiopathogenesis of neurodevelopmental diseases such as ASD and ADHD, and these parameters can be used as inflammation markers. Future research is needed to identify other factors associated with inflammation, to elucidate the inflammatory mechanisms in the pathogenesis, to explain whether inflammation affects the symptom profile and treatment response, and to explain the relationship between PCT and CRP levels and the severity of these diseases.

**Keywords:** Procalcitonin (PCT), C-reactive protein (CRP), Inflammation, Autism spectrum disorder, Attention deficit and hyperactivity disorder

[Abstract:0042] [Eating disorders]

**0042 - Turkish version of the nine item arfid screen parent form: validity and reliability study in a pediatric sample**

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**OBJECTIVE:** Avoidant/Restrictive Food Intake Disorder (ARFID) is an eating or feeding disorder characterized by inadequate nutritional or caloric intake leading to weight loss, nutritional deficiency, supplement dependence, and significant psychosocial impairment. This study aimed to investigate the psychometric properties of the Nine Item Avoidant/Restrictive Food Intake disorder screen (NIAS) parent form in a Turkish pediatric sample.

**METHOD:** The sample consisted of 268 children (137 girls and 131 boys) aged between 2 and 18. Parents were asked to complete the NIAS parent form, Behavioral Pediatric Feeding Assessment Scale, Children's Eating Behavior Questionnaire for their children and Depression Anxiety and Stress Scale 21 for themselves. Data analyses for reliability and validity were carried out using RStudio version 1.3.1093 (R Studio, PBC).

**RESULTS:** According to confirmatory factor analysis, the total contribution of three factors to the variance was 78.4%. The factor loadings at the subscales level ranged between 0.78 and 0.90 for the Picky eating subscale, between 0.86 and 0.92 for the Appetite subscale and between 0.89 and 0.94 for the Fear subscale. The fit indices calculated from the CFA were RMSEA = 0.092. Internal consistency (Cronbach alpha coefficient) analysis was used to determine the reliability of the NIAS. The Cronbach alpha coefficient was found to be 0.86 for the Picky Eating subscale, 0.87 for the Appetite subscale, and 0.91 for the Fear subscale.

**CONCLUSION:** These findings suggest that the NIAS parent form is a brief, valid and reliable instrument that may be used to screen ARFID-related eating behaviours in Turkish children.

**Keywords:** ARFID, NIAS, Eating Disorders, Pediatric, Validity and Reliability

[Abstract:0043] [Epidemiology]

**0043 - Suicide probability, depression, anxiety, and burnout in assistant doctors**

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**BACKGROUND and OBJECTIVE:** Mental disorders and suicide rates are common among physicians (1-3). We aimed to investigate the suicide probability, depression, anxiety, and burnout in assistant doctors.

**METHODS:** Hospital Anxiety and Depression Scale, Maslach Burnout Scale, and Suicide Probability Scale were applied. The scales were applied online by the researchers via Google Forms. Online written consent was obtained from individuals who volunteered for the study. Written ethics committee approval was obtained from Akdeniz University Clinical Research Ethics Committee for the study.

**RESULTS:** 172 assistants were included in the study. The mean age was 29.15±3.07 years. Of all participants, 57 (33.1%) were male, 115 (66.9%) were female, and 92 (53.5%) were single. Of the assistants, 49 (28.5%) were working in the surgical departments and 123 (71.5%) were working in the internal departments. 77.9% (n=134) reported that they will not be a doctor if given the chance again, 78.5% (n=135) reported that they were exposed to violence while doing their job, and 96.5% (n=166) were afraid of being exposed to violence. Median verbal violence was 4 (1-100) and median physical violence was 1 (1-4). According to the cut-off points of the scales, 85 (49.41%) individuals had anxiety disorder and 111 (64.53%) had depression. The number of night shifts was positively associated with anxiety (p<0.001), depression (p<0.001), burnout (p<0.001), and suicide probability (p=0.027). Burnout and suicide probability were also positively related (p<0.001). Burnout, probability of suicide, and anxiety were higher in surgical departments than in internal departments (p=0.002, p=0.001, p=0.031, respectively). Burnout, depression, and anxiety were higher in those with a history of violence than in those without a history of violence (p<0.001, p=0.004, p=0.014, respectively).

**CONCLUSIONS:** Very high rates of depression and anxiety were found in assistant doctors. The vast majority of assistants have experienced violence. Night shifts were associated with mental disorders. Burnout, depression, and anxiety were high in those who were exposed to violence. The probability of suicide increases as burnout increases. We recommend that the working conditions of resident doctors be improved immediately and that violence should be stopped.

**Keywords:** Assistant doctors, depression, anxiety, burnout, suicide

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**[Abstract:0049] [Obsessive-compulsive disorders (OCD)]**

**0049 - Sexual and religious obsessions in pediatric obsessive-compulsive disorder: outcome of day treatment**

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**OBJECTIVE:** Sexual and religious obsessions are more uncommon in children and adolescents than in adults. Although cases with sexual and religious obsessions are different in terms of clinical features, recent studies have shown that treatment responses are similar to other obsessions. In this study, we aimed to discuss the results of pediatric OCD patients with sexual/religious obsessions after day treatment. Secondly, we planned to compare the results with other OCD cases.

**METHOD:** Scales were applied to the cases at the entrance and exit from the day clinic treatment. Childhood Depression Inventory (CDI), State Trait Anxiety Inventory for Children (STAI for children), State-Trait Anxiety Inventory (STAI), Maudsley OCD Scale, Clinical Global Impression scale (CGI), Global Assessment Scale for children (CGAS) were applied to the patient. The Yale-Brown Obsession-Compulsion Scale (YBOCS) was administered by the interviewer. Cognitive behavioral therapy (CBT) and pharmacological therapy were administered to each patient throughout the treatment. Milieu therapy, art therapy, occupational therapy and relaxation techniques were also applied to the patients in the day clinic. The data of 15 patients (group 1) with sexual/religious obsessions followed in the day clinic and 35 patients with other obsessions (group2 ) were compared.

**RESULTS:** The mean age of group 1 was 13.9 ( $\pm 2.3$ ) and the mean age of group 2 was 14.9 ( $\pm 1.4$ ). Both groups were similar in terms of gender distribution, duration of treatment and age of onset. When group 1 and group 2 were compared, the number of obsessions, the level of sertraline and the rate of antipsychotic use were significantly higher in the group with sex-religious obsessions ( $p < 0.05$ ). Both groups showed significant improvement after treatment.

**CONCLUSION:** Sexual and religious obsessions occur more frequently in adolescence than in childhood. It is known that these obsessions are more resistant to treatment and are associated with negative prognosis. For their treatment, structured and intensive treatment environments such as day clinics are needed.

**Keywords:** day treatment, sexual/religious obsession, pediatric obsessive-compulsive disorder

[Abstract:0054] [Autism Spectrum Disorders]

**0054 - Examination of electrocardiographic parameters in children with Autism Spectrum Disorder**

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**OBJECTIVE:** Autism Spectrum Disorder(ASD) is a neurodevelopmental disorder that begins to appear at an early age, manifested by limitations in social skills and communication deficits along with stereotyped repetitive behavior. There is no biomarker or objective diagnostic test for the disorder.Both comorbid psychiatric disorders and some medical illness could be seen more frequently in ASD than those with typical development. Although there are many studies on the electrocardiographic parameters of individuals with mental disorders in adulthood, there are few studies on the electrocardiographic changes of children with ASD such as drug side effects studies. Our aim was to compare the electrocardiographic parameters of children with ASD with their healthy peers.Secondly, it was investigated whether electrocardiography(ECG) had a pathognomonic finding for the diagnosis of ASD.

**METHODS:** The study has a single-center, prospective controlled study design. Our sample was consisted of 26 boys with ASD and 49 healthy-control cases of the similar age and gender who applied to a tertiary hospital. The participants were evaluated for inclusion/exclusion criteria and ECG recordings were performed.After the patient rested for at least 10 minutes,ECG recordings were taken by the same ECG nurse in a single center. ECG recordings of the patients at admission were digitally scanned and then manually analyzed using ImageJ ([imagej.nih.gov/ij](http://imagej.nih.gov/ij)) and Cardio caliper programs at 300% magnification by an experienced cardiologist.Study data were evaluated using SPSS 24.0 statistics program.For descriptive analysis; numeric variables were shown as mean and standard deviation, categorical variables were shown as number and percentage.Significance was set at  $p<0.05$  in the analyses.Approval for the study was granted by the Clinical Research Ethics Committee of the University of Health Sciences (2022/23).

**RESULTS:** The mean age of the boys with ASD group was  $10.8\pm 2.8$ , the mean age of the control group was  $10.9\pm 3.3$ , and there was no significant difference between the ages of the groups ( $p=0.88$ )(Table-1). The ventricular velocity and P value mean were found to be significantly higher in the autism group than the controls ( $p 0.02, 0.04$ , respectively)(Table-2).The mean QT value of the autism group was found to be significantly lower than the control group( $p=0.02$ )(Table-2). There was no significant difference between the two groups in the mean values of other ECG parameters.

**CONCLUSION:** P-wave duration is generally accepted as the most reliable noninvasive marker of atrial conduction,and its prolongation has been associated with history of atrial fibrillation.When we compared the children with ASD with the control group,the P wave was found to be larger, suggesting that even if these values are within the normal range, they may pose a risk for atrial arrhythmias.In our study, it was also found that the ventricular rate was higher in children with ASD.Autonomic dysfunction is associated with many cardiac

problems. There are studies suggesting that there is autonomic dysfunction in individuals with autism. Some parameters that affect the excess of sympathetic activation, such as sedentary life and obesity are more common in individuals with ASD. Further studies are needed that include anthropometric measurements, psychotropic drugs, and objective tests measuring activity levels of children with autism.

**Keywords:** Autism Spectrum Disorder(ASD), electrocardiography(ECG), children

**Table-1: Comparison of age variable of ASD group and control group. (mean±SD)**

	ASD (n=26)	Control (n=49)	p
Age (year)	10.8±2.8	10.9±3.3	0.88

**Table-2: Summary of children's ECG parameters with regard to groups.**

	ASD (n=26)	Control (n=49)	p
Vent rate (bpm)	96.4±16.9	86.4±17.5	0.02*
P (ms)	93.19±12.6	88.9±10.9	0.04**
Tp-e	76.5±16.4	80.9±14.9	0.26*
PR int(ms)	134.6±16.4	134.1±15.6	0.90*
QRS dur(ms)	89.2±10.6	86±2±11.9	0.34**
QT (ms)	345.7±25.6	364.9±38.6	0.02*
Tp-e/QT	0.22±0.04	0.22±0.03	0.96*
QTc int (ms)	397.3±19.6	404.7±26.1	0.17*
Tp-e/QTc	0.19±0.04	0.19±0.03	0.49*
T axis	42.3±27.9	47.5±17.8	0.09**

\*T test, \*\* Mann Whitney U Test

### [Abstract:0055] [Autism Spectrum Disorders]

#### **0055 - The Relationship between autistic traits and peer bullying, loneliness and anxiety in adolescents**

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**OBJECTIVE:** Autistic traits are characterized by difficulties in interpreting social information, deficits in understanding what others are thinking and feeling (1). These traits may elevate the risk for interpersonal victimization. In this study, the relationship between autistic traits, peer bullying, loneliness and anxiety level were investigated in adolescents.

**METHOD:** The study included 61 adolescents aged 13-15 years and their parents, who applied to the outpatient clinic for the first time and volunteered. Parents were asked to fill in the adolescent autism spectrum quotient (AQ) for their children, and the adolescent was asked to

fill in the peer bullying and UCLA loneliness scales. It was hypothesized that adolescents that have higher AQ total scores have higher levels of loneliness, peer bullying and anxiety.

**RESULTS:** A total of 60 adolescents (44 girls and 16 boys) with a mean age of 14.6 were included in the study. A positive and significant correlation was found between autistic trait and anxiety total scores and between peer bullying and loneliness total scores.

**CONCLUSION:** In our study higher autistic traits were found to be associated with higher levels of anxiety and also peer bullying was found to be related with higher loneliness in adolescents. Deficits in emotional and social cognition, inability to identify inappropriate behavior and one's own discomfort with inappropriate behavior increase the risk of victimization in autistic traits (2–4) Also peer bullying in adolescents contributes to children's prolonged sense of loneliness (5). Validated screening tools should be developed in this population to support earlier reporting.

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**Keywords:** autism, peer bullying, anxiety, adolescent

[Abstract:0056] [Attention deficit hyperactivity disorder (ADHD)]

### 0056 - Effects of attachment and maternal functioning on preschool ADHD and conduct problems

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**OBJECTIVE:** We aimed to describe the association between preschool ADHD and attachment, and effects of maternal functioning on ADHD and conduct problems (CP).

**METHODS:** Symptom screening, clinical evaluation, unstructured observational assessment, and Doll Story Completion Task were performed to 40 ADHD and 36 non-ADHD preschoolers. Parents filled in the Mother to Infant Bonding Scale (MIBS), Wender Utah Rating Scale (WURS), Symptom Checklist 90-Revised (SCL-90-R), and Adult Attachment Style Scale.

**RESULTS:** Less children in ADHD group had secure attachment compared to control group. Parents of ADHD children had higher avoidant attachment and more psychopathology. ADHD levels of children were negatively correlated with child secure attachment score. ADHD and CP levels of children positively correlated with scores of MIBS, WURS, and general severity index of SCL-90-R. Worse mother-child bonding and child secure attachment were associated with children's ADHD symptoms. Maternal ADHD and worse bonding were associated with CP.

**CONCLUSION:** Psychosocial factors can be crucial for developing prevention methods and alternative treatment modalities for ADHD.

**Keywords:** : preschool ADHD, attachment, maternal psychopathology, maternal ADHD, conduct problem, bonding

[Abstract:0057] [Autism Spectrum Disorders]

**0057 - Retinal thickness in autism spectrum disorder compared to healthy siblings and healthy control group**

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**OBJECTIVE:** The purpose of this research is to investigate retinal characteristics of children with autism spectrum disorder (ASD) and compare with healthy siblings and healthy control group to show possible retinal changes.

**METHODS:** 30 children with ASD, 30 healthy siblings of ASD children and 30 healthy children were included. The children who had history of psychotic and bipolar disorders or had eye disease or previous eye surgery or systemic disease were excluded. Optical coherence tomography were used to examine the thickness of macula, peripapillary retinal nerve fiber layer (pRNFL), retinal nerve fiber layer (RNFL), ganglion cell layer(GCL), inner plexiform layer(IPL), outer plexiform layer(OPL), outer nuclear layer(ONL), inner nuclear layer(INL) and retinal pigment epithelium(RPE) of right eyes of three groups.

**RESULTS:** Macula average was found thicker in ASD group, compared to healthy siblings and healthy control. Also NFL average, IPL average, INL average, INL temporal inner, INL temporal outer layers were thicker in ASD group compared to healthy controls. INL nasal inner layer was thicker in ASD and healthy siblings than healthy control.

**CONCLUSION:** We revealed that autistic children and their healthy siblings, who have similar genetic heritage, had retinal thickenings at certain retinal layers. Since the retina contains unmyelinated axon and glia and originates from the central nervous system, it is thought that the examination of retinal layer thickness may be a sensitive method for the evaluation of etiology of autism spectrum disorder. More research is needed for the use of retinal layers as a biomarker in ASD and a risk factor for family members.

**Keywords:** Autism, Retinal thickness, Optical coherence tomography, Neurobiology, Biomarker

[Abstract:0058] [Obsessive-compulsive disorders (OCD)]

**0058 - Comparison of TSH and fT4 serum levels of obsessive-compulsive disorder patients with the healthy control group**

Yaşar Kapıcı

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**OBJECTIVE:** Obsessive-compulsive disorder (OCD) consists of obsessions that cause anxiety and repetitive compulsions to reduce this anxiety. It is assumed that OCD is seen in 2-3% of the general population. Neurotransmitter anomalies, genetic factors, and immunological causes are blamed on the etiology of OCD. There are data in the literature showing that thyroid gland diseases are more common in OCD patients.

**METHODS:** Forty OCD patients diagnosed according to the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) and 41 healthy control groups were included in the study. Care was taken to ensure that the participants had no known thyroid gland disease or other autoimmune diseases. Healthy controls were selected based on their self-reports and medical records. Sociodemographic data of the participants and thyroid stimulating hormone (TSH) and free thyroxine 4 (fT4) serum levels were recorded.

**RESULTS:** The mean age of OCD patients (18 men, 22 women) was  $29.33 \pm 4.06$ . The mean age of healthy controls (22 men, 19 women) was  $28.28 \pm 5.10$ . There was no significant difference between OCD patients and healthy controls regarding age and gender distribution. The mean TSH serum level of OCD patients was  $2.37 \pm 0.90$  uIU/MI, and the mean fT4 serum level was  $0.72 \pm 0.10$  ng/dL. The mean TSH serum level of healthy controls was  $2.07 \pm 0.81$  uIU/MI, and the mean fT4 serum level was  $0.78 \pm 0.10$  ng/dL. Serum fT4 levels were significantly lower in OCD patients compared to healthy controls ( $p=0.012$ ). There was no significant difference between the groups regarding TSH serum levels ( $p=0.133$ ).

**DISCUSSION:** Thyroid hormones have a vital role in the brain's development and brain's physiological functioning. In the fetal period, thyroid hormones play a role in neuronal development, synapse formation, the proliferation of glial cells, neurotransmitter synthesis, and myelination. In cases where thyroid hormone levels decrease, deterioration in the antioxidant system in the brain, deterioration of neuronal development, and mental retardation are observed. Thyroid hormone abnormalities have been associated with depression, mania, cognitive dysfunction, and acute psychosis. It has been reported that OCD is more common in patients with Hashimoto's thyroiditis. It is thought that autoimmune diseases affecting the thyroid gland may have triggered OCD. The blaming of autoimmune processes in the etiology of pediatric autoimmune neuropsychiatric diseases (PANDAS) associated with streptococcal infection also suggests the influence of a neuroinflammatory process caused by the immune system in the pathogenesis of OCD.

**Keywords:** Autoimmune, Obsessive Compulsive Disorder, Thyroid gland

**[Abstract:0059] [Mood disorders]****0059 - Comparison of inflammatory parameters of bipolar depression, unipolar depression, and healthy controls**

Yaşar Kapıcı

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**OBJECTIVE:** It is known that the immune system is activated in severe mental illnesses. It has been reported that there is dysregulation in the immune system and cytokine activation in bipolar disorder and depression (1,2). Cytokine activation is thought to disrupt the hypothalamic-pituitary-adrenal (HPA) axis and causes depressive symptoms (3). Pan-immune inflammation value (PIV) and systemic immune-inflammation index (SII) are used as novel markers as indicators of the immune system (4).

**METHODS:** Adiyaman University Ethics Committee approved the method of the study (Decision Number: 2021/09-04). 36 (21 F, 15 M) bipolar depression patients, 36 (15 F, 21 M) unipolar depression patients, and 38 (17 F, 21 M) healthy controls were included in the study. Care was taken to ensure that the participants had no other organic disease. Sociodemographic data and hemogram parameters of the participants were recorded. PIV was calculated from absolute values of complete blood counts as follows  $PIV = \frac{[\text{neutrophil count (106/mm}^3) \times \text{platelet count (103/mm}^3) \times \text{monocyte count (103/mm}^3)]}{\text{lymphocyte count (103/mm}^3)}$ . SII was defined as follows:  $SII = \frac{[\text{neutrophil count (106/mm}^3) \times \text{platelet count (103/mm}^3)]}{\text{lymphocyte count (103/mm}^3)}$ .

**RESULTS:** The mean age of the bipolar depression group was  $27.97 \pm 4.06$ , the mean age of the unipolar depression group was  $29.7 \pm 5.3$ , and the mean age of the healthy control group was  $29.3 \pm 4.35$ . There was no significant difference between the groups regarding mean age and gender distribution ( $p=0.815$  and  $p=0.320$ , respectively). According to Kruskal-Wallis analysis, SII differed significantly between groups ( $p=0.008$ ). The PIV value did not differ significantly between the groups ( $p=0.102$ ). According to the Mann-Whitney U test, there was no significant difference between the bipolar depression and unipolar depression groups regarding SII value ( $p=0.401$ ). The SII values of the bipolar depression and unipolar depression groups were significantly higher than the healthy control group ( $p=0.002$  and  $p=0.039$ , respectively).

**DISCUSSION:** In this study, inflammation indicator SII was significantly higher in patients with both bipolar depression and unipolar depression compared to the healthy control group. In previous studies, increased acute phase reactants increased serum levels of lymphocyte subtypes, and increased neutrophil/lymphocyte ratio was reported in these diseases. This study supports the hypothesis that neuroinflammatory processes may have a role in the pathophysiology of these diseases, as we found the SII value to be high in patient groups.

**Keywords:** Bipolar Depression, Unipolar Depression, Pan-immune inflammation value, Systemic immune-inflammation index

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**[Abstract:0063] [Eating disorders]**

**0063 - Comorbidities and sociodemographic characteristics of children and adolescents with eating disorders: An inpatient psychiatric sample**

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**OBJECTIVE:** This study aims to describe the sociodemographic and clinical features of adolescents with eating disorders hospitalized in the Child and Adolescent Psychiatry Clinic and/or Adolescent Health Clinic in Ankara.

**METHOD:** Adolescents (11-17 years old) diagnosed with eating disorders were hospitalized in Ankara City Hospital Child and Adolescent Psychiatry Clinic and/or Adolescent Health Clinics between January 2021 and June 2022 and were included in our study. Sociodemographic characteristics, body mass index (BMI), comorbid psychiatric diseases, and hospitalization duration of the sample were retrospectively scanned and recorded.

**RESULTS:** Forty patients were included in our study. They were predominantly girls (97.5%), with a median age of 15 (11-17 years). The main diagnosis was anorexia nervosa restricting type (n=29) according to DSM-5. Adolescents' BMI values were 16.45 (min=11.90, max=28). The main comorbidity was depression (42.5%), followed by anxiety disorders (12.5%). Twenty-two patients were hospitalized in Adolescent Health Clinics, and 29 were hospitalized in Child and Adolescent Psychiatry Clinic. In addition, 11 patients (27.5%) were hospitalized in both clinics. While the length of stay of the adolescents with AN in the Child and Adolescent Psychiatry Clinic was 34 days (min=14 days max=99 days), the hospitalization duration in the Adolescent Health Clinic was 11.5 days (min=2 days max=27 days).

**CONCLUSION:** Our results suggest that AN restricting type may need more inpatient treatment in our hospital. The length of hospitalization for adolescents with eating disorders in the Child and Adolescent Psychiatry Clinic was longer than in the Adolescent Health Clinic. Depression was the main comorbidity of adolescents with eating disorders.

**Keywords:** Adolescent, Anorexia Nervosa, Inpatients



[Abstract:0066] [Mood disorders]

**0066 - Evaluation of malondialdehyde, superoxide dismutase and catalase activity in euthymic bipolar patients**

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**BACKGROUND AND AIM:** Growing evidence suggests that oxidative stress plays an important role in the pathophysiology of bipolar disorder (BD). However, there are inconsistent results reported in the literature regarding oxidative parameters that may arise from confounding factors. Therefore, we aimed to compare serum malondialdehyde (MDA), superoxide dismutase (SOD), and catalase (CAT) levels between patients diagnosed with BD and age- and sex-matched healthy controls (HCs) to improve knowledge in this area.

**METHODS:** The study population included 35 healthy controls and 35 euthymic outpatients who met the criteria for BD in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Demographic data form including age, gender, marital status, duration of education and comorbid conditions were applied to all participants. Blood samples were taken from the participants between 9:00 am and 12:00 am, and serum samples obtained by centrifugation were stored at  $-28^{\circ}\text{C}$  until analysis.

**RESULTS:** There was no significant difference between the two groups in terms of age and gender. In the patient group, the duration of illness was  $10.28 \pm 6.32$  years, age of onset was  $23.54 \pm 5.17$ , number of manic episodes was  $2.82 \pm 2.05$ , and number of depressive episodes was  $1.68 \pm 1.27$ . 11 patients (31.4%) were using only mood stabilizers, 8 patients (22.8%) were using only antipsychotics, and 16 patients (45.8%) were using both a mood stabilizer and an antipsychotic drug. Compared with HCs, the levels of MDA ( $P < 0.001$ ) were higher and the levels of SOD and CAT were lower ( $P < 0.001$ ) in patients group.

**CONCLUSIONS:** Our results supports the idea that oxidative stress plays an important role in BD with decreased antioxidant level as well as increased lipid peroxidation marker in patients group.

**Keywords:** Oxidative stress, Catalase, Superoxide dismutase, Malondialdehyde

**[Abstract:0070] [Disruptive behavior disorders]**

**0070 - Relationship between peer relations, parental attachment styles, and level of tendency to violence in adolescents diagnosed with attention deficit and hyperactivity disorder**

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**OBJECTIVE:** Parental factors have recently been investigating to explain the reasons of violent behaviors, which is observed more frequently in adolescents with Attention deficit and Hyperactivity Disorder (ADHD) compared to healthy controls. However, the relationship between parental attachment styles and violence behaviors of the patients with ADHD remains unclear. It was aimed to investigate the impacts of peer relations, parental attachment styles and disease-related factors (ADHD subtype, disease duration) on violence tendency in cases followed up with ADHD diagnosis in a Child and Adolescent Psychiatry outpatient clinic.

**METHODS:** Adolescents aged 12 to 18 years who were newly diagnosed or followed up with ADHD diagnosis in a Child and adolescent psychiatry outpatient clinic in August 2021-April 2022 (n=115) were recruited to the study. Parents of the participants were asked to fill out a detailed researcher form and “Strengths, and Difficulties Questionnaire-parent form” (SDQ). Adolescents were given Peer Relation Scale (PRS)”, “The Scale of Tendency to Violence” and Inventory of Parent and Peer Attachment-revised (IPPA-R).

**RESULTS:** Hierarchical linear regression analyses indicated that peer relationship problems (PRS-loyalty subscale) (B= 1.155, p<.001) and psychiatric difficulties (the SDQ-total) (B=.617, p<.001) were significantly associated with violence tendency.

**CONCLUSION:** Children, excluded by their friends, can form groups with peers exhibit similar characteristics at school or in the neighborhood. It should be considered that these groupings may play a role in joining criminal gangs in the future. The effect of parental attachment styles on violent behavior observed in children with ADHD will be better elucidated by future studies with larger samples.

**Keywords:** ADHD, violence tendency, parental attachment, peer relations, adolescents

**[Abstract:0071] [Mood Disorders]**

**0071 - The Relationship between psychological pain and suicide in patients with bipolar disorder**

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**OBJECTIVE:** It is known that the life expectancy of patients with bipolar disorder (BD) is shorter than the general population. Some of the deaths in these patients are due to unnatural causes such as suicide, accident and homicide. Suicide-related death is observed 15 times more in patients with BD compared to the general population. In our study, it was aimed to determine the suicide rate in patients with BD and to investigate the relationship between psychological pain and suicide.

**METHODS:** 118 outpatients with BD diagnosed between the ages of 18-65 were included in our study. All participants were given a sociodemographic data form, beck suicidal ideation and psychological pain scale prepared by us. The institutional ethics committee approved the study protocol as a non-interventional trial.

**RESULTS:** Beck suicide scale score, psychological pain scale score, number of depressive episodes, number of manic episodes, number of hospitalizations were significantly higher in the group with suicide attempt ( $p < 0.05$ ). In addition, a significant ( $p < 0.05$ ) positive correlation was observed between the psychological pain scale and the Beck suicide scale.

**CONCLUSION:** Our results showed that psychological pain was associated with previous suicide attempts in patients with BD. Interventions for psychological pain in patients with BD can reduce suicide attempts, the number of attacks and the number of hospitalizations.

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**Keywords:** Bipolar disorder, suicide, psychological pain

[Abstract:0072] [Obsessive Compulsive Disorders]

### 0072 - Neurological soft signs in obsessive compulsive disorder

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**BACKGROUND and OBJECTIVE:** Obsessive-compulsive disorder (OCD) is a clinically heterogeneous disorder. Insight of OCD patients has been classified in 3 different categories in DSM-V: good insight, poor insight, and delusional. Neurological soft signs (NSS) are minor neurological findings that are thought to develop secondary to neurodevelopmental disorders, do not indicate a specific neurological disorder, but is thought to be an organic disorder in holistic evaluation. The aim of this study was to investigate the NSS in obsessive compulsive disorder. It was also aimed to investigate whether OCD patients with good insight and poor insight differ in terms of NSS.

**METHODS:** This study was carried out with 60 patients with OCD and 45 healthy volunteers. OCD symptoms were evaluated with The Yale-Bown Obsessive Compulsive Scale. Insight levels of OCD patients were determined by Brown Assessment of Belief Scale. The patients were divided into two groups as having good insight and poor insight. Neurological soft signs were evaluated using Neurological Evaluation Scale (NES).

**RESULTS:** There was a significant difference between the 3 groups in terms of NES-total and subscale scores (OCD with poor insight:  $12.82 \pm 0.62$ , OCD with good insight  $9.07 \pm 0.17$ , control:  $4.02 \pm 0.48$ ,  $p < 0.001$ ). NES-motor coordination ( $p < 0.001$ ), NES-sequencing of motor acts ( $p < 0.001$ ), NES-sensory integration ( $p < 0.001$ ) scores of the OCD with poor insight were significantly higher than the OCD with good insight. There was no significant difference between NES-motor coordination ( $p = 0.187$ ), NES-sequencing of motor acts ( $p = 0.962$ ), NES-sensory integration ( $p < 0.511$ ) subscale scores of OCD patients with good insight and healthy control group.

**CONCLUSIONS:** NSS was significantly severe in OCD patients with poor insight than in patients with good insight. Patients with poor insight differed significantly from healthy volunteers and patients with good insight in terms of NSS. Our results support that patients with poor insight may be a subtype with clinically and neurobiologically different characteristics among OCD patients.

**Keywords:** Obsessive-compulsive disorder, insight, neurological soft signs

[Abstract:0074] [Neuroscience: Neuroimaging-Genetic- Biomarker]

### 0074 - Comparison of brain magnetic resonance imaging findings of bipolar disorder patients with the healthy control group

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**OBJECTIVE:** Bipolar disorder is a psychiatric disorder that usually starts in late adolescence and can last a lifetime. Brain magnetic resonance imaging (MRI) studies on bipolar disorder have revealed various structural abnormalities in the brain.

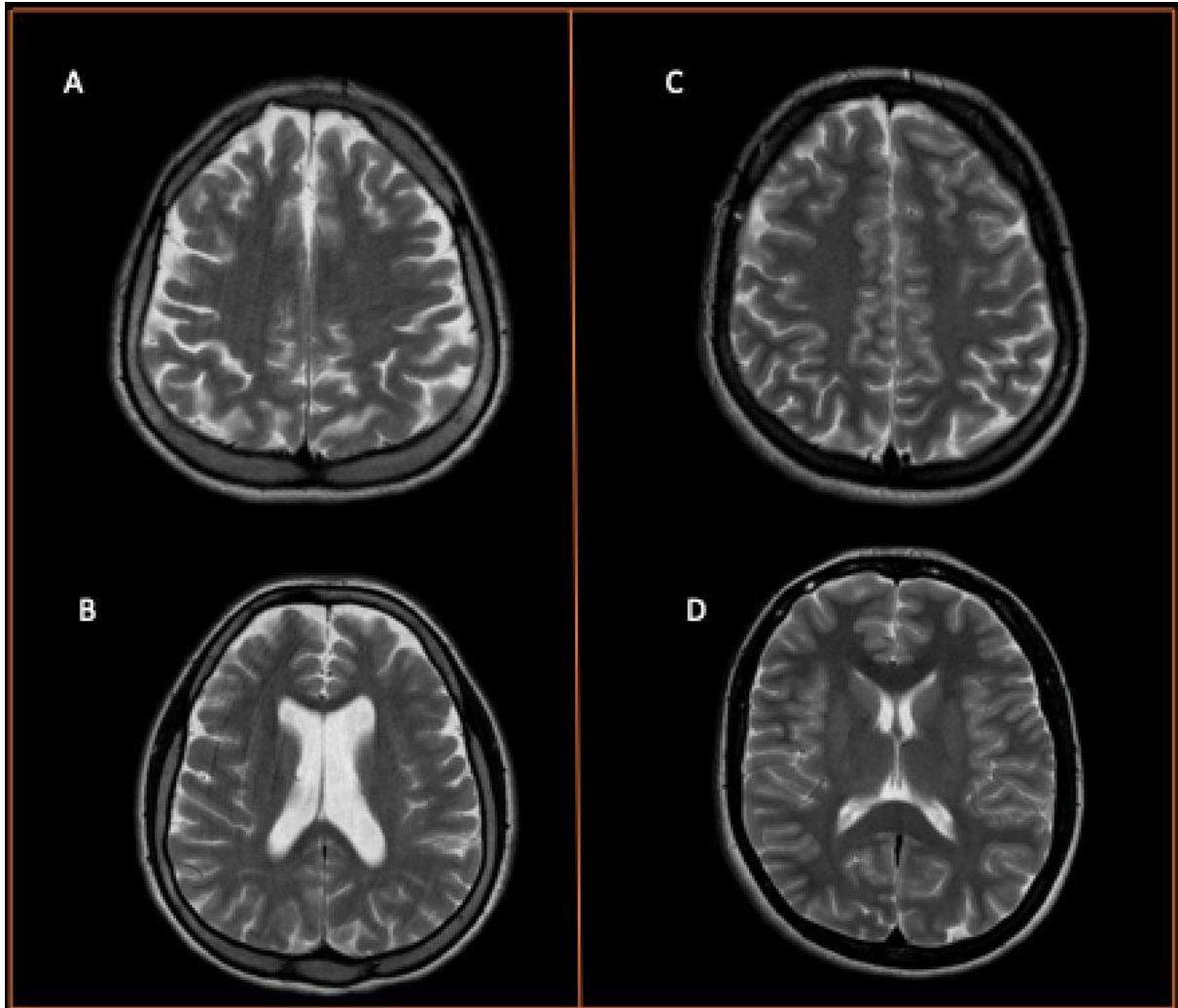
**METHODS:** Brain MRIs of 51 (30 M, 21 F) bipolar disorder patients and 54 (28 M, 26 F) healthy controls were analyzed. Cerebral atrophy, gliotic foci, cystic encephalomalacia, partial empty sella, hydrocephalus, arachnoid cyst, tornwaldt cyst, enlarged perivascular space, periventricular gliosis, cavum septum pellucidum (CSP), cavum vergae (CV), sinus and nasal anomalies were evaluated in brain MRI.

**RESULTS:** The mean age of bipolar disorder patients was  $37.29 \pm 11.24$ , and the mean age of the healthy control group was  $35.83 \pm 11.45$ . There was no significant difference between the two groups regarding age and gender ( $p = 0.511$  and  $p = 0.473$ , respectively). Brain MRI findings of the groups are shown in Table 1. Accordingly, diffuse brain atrophy was significantly higher in bipolar disorder patients ( $p = 0.005$ ). Although gliotic foci, CVP, and CV were more common in patients with bipolar disorder, no significant difference was found between the groups regarding these anomalies. Demyelinating plaque, periventricular gliosis, cystic encephalomalacia, tornwaldt cyst, partial empty sella, hydrocephalus, and enlarged perivascular space were detected only in bipolar disorder patients.

**DISCUSSION:** In studies on brain MRIs of patients with bipolar disorder, cerebral atrophy was reported less frequently, while enlargement in the second and third ventricles was mentioned more. This study detected diffuse cerebral atrophy more frequently in bipolar disorder patients. Studies mention an increased risk of dementia in patients with bipolar disorder, and the cerebral atrophy finding we obtained suggests that these patients are at risk for dementia.

**Keywords:** Magnetic resonance imaging, Bipolar disorder, Cerebral atrophy

**Brain MRIs of The Same Age and Gender (28 Years Old, Female) Bipolar Disorder Patient and Healthy Control.**



*Sulci are apparent with slight atrophy in patient (a,b) with bipolar disorder on axial sections on T2-weighted images. In healthy control (c,d) sulci look compatible with age.*

**Comparison of Brain MRI Findings of Bipolar Disorder Patients and Healthy Control Group**

	HC (n=54) n/%	BD (n=51) n/%	$\chi^2$	p
Cerebral atrophy	5 / 9.3	17 / 33.3	7.782	0.005
Nonspecific gliotic foci	8 / 14.8	15 / 29.4	3.267	0.071
Cavum septum pellucidum	2 / 3.7	5 / 9.8		0.261
Cavum vergae	1 / 1.9	6 / 11.8		0.056
Ethmoid sinus mucosal thickening	22 / 40.7	31 / 60.8	4.215	0.040
Maxillary sinus mucosal thickening	9 / 16.7	8 / 15.7	0.019	0.892

Sphenoid sinus mucosal thickening	5 / 9.3	4 / 7.8	0.796
Frontal sinus mucosal thickening	4 / 7.4	5 / 9.8	0.661
Retention cyst	9 / 16.7	11 / 21.6	0.409 0.523
Septal deviation	16 / 29.6	9 / 17.6	2.076 0.150
Adenoid hypertrophy	2 / 3.7	5 / 9.8	0.261
Demyelination plaque	0 / 0	1 / 2	N/A
Tornwaldt cyst	1 / 1.9	1 / 2	0.967
Periventricular gliosis	0 / 0	1 / 2	N/A
Cystic encephalomalacia	0 / 0	2 / 3.9	N/A
Partial empty sella	0 / 0	1 / 2	N/A
Hydrocephalus	0 / 0	1 / 2	N/A
Arachnoid Cyst	2 / 3.8	3 / 5.9	0.603
Enlarged perivascular space	0 / 0	1 / 2	N/A
Mastoid effusion	0 / 0	3 / 5.9	N/A

*HC, Healthy Control; BD, Bipolar Disorder The chi-square test was used. p value < 0.05 was accepted as statistical significance value.*

#### [Abstract:0081] [Autism Spectrum Disorders]

#### 0081 - Artificial intelligence-based emotion analysis of Turkish Twitter messages in Autism Spectrum Disorders

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**OBJECTIVE:** Autism Spectrum Disorders are a very popular topic on social media, and it is thought by experts and families that the representation of autism on social media is problematic and is frequently used in negative terms. This study, it is aimed to conduct a sentiment analysis of tweets containing autism keywords.

**METHODS:** Turkish messages about autism were analyzed with Python and Tweepy application between 20.11.2021 and 13.02.2022. The keywords "autism" and "autistic" were used in scanning the messages. Feature extraction was done from the transformers with the Bidirectional Encoder Representations from Transformers (BERT) method and the messages were classified as positive, neutral, and negative with artificial neural networks. The study has been approved by the Institutional Review Board of Fenerbahçe University number: E-67888467-204.01.07-8822.

**RESULTS:** In our study, a total of 17456 tweets were reached. In sentiment analysis of tweets containing the word "autism", 12.1% negative (n:1852), 84.5% neutral (n:12939), 3.4% positive (n:525), and tweets containing the word "autism" were 56.3% negative (n:1205), 31.1% neutral

(n:730), 9.6% positive (n:205). It has been determined that the word "autistic" contains statistically significantly higher negative emotions and less neutral emotions.

**CONCLUSION:** In this study, it was determined that autism-related tweets contained low rates of positive emotions and the word "Autistic" was associated with negative emotions. Professional organizations and mental health professionals need to be more effective in this area to break social media stigma and prejudices.

**Keywords:** Autism, Sentiment Analysis, Stigma, Twitter

[Abstract:0082] [Attention deficit hyperactivity disorder (ADHD)]

### 0082 - Eye traumas and attention deficit hyperactivity disorder in children

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**OBJECTIVE:** The aim of the study is to investigate whether there is a relationship between eye traumas and attention deficit/hyperactivity disorder (ADHD) in children and to examine whether there is a correlation between trauma severity and ADHD.

**METHODS:** A total of 48 pediatric patients with eye trauma, including 24 patients with corneal abrasion in the mild trauma group and 24 patients with penetrating eye injuries in the severe trauma group, and 48 healthy children with similar-age and gender were included in this case-control study. The Conners Parent Rating Scale-Revised Short was used to assess ADHD symptoms.

**RESULTS:** Sociodemographic characteristics of both groups were similar ( $p > 0.05$ ). While the oppositional, problems/inattention, and hyperactivity subscales scores of the case group were similar to the control group ( $p > 0.05$ ), the ADHD index score was significantly higher in the case group ( $10.33 \pm 7.70$  vs.  $6.56 \pm 4.46$ ,  $p = 0.016$ ). In the subgroup analysis performed according to the trauma severity, the scores of the oppositional, problems/inattention, and hyperactivity subscales were found to be similar ( $p > 0.05$ ).

**CONCLUSION:** The results of this study showed that childhood eye trauma is associated with ADHD. Revealing the population diagnosed with ADHD at risk for injuries may be the first and most important step in prevention against eye trauma.

**Keywords:** ADHD, eye trauma, Child, Hyperactivity

[Abstract:0083] [Addiction Psychiatry]

**0083 - Investigation of adolescents diagnosed with primary obesity in terms of internet and smartphone addiction, ADHD and other psychiatric comorbidities**

Gülnur Baş<sup>1</sup>, Ömer Kardeş<sup>2</sup>

<sup>1</sup>Mardin Training and Research Hospital

<sup>2</sup>Kocaeli University School of Medicine

**OBJECTIVE:** With this study, it was aimed to investigate the sociodemographic characteristics, psychopathologies of obese adolescents, to determine their internet/smartphone usage characteristics, addiction levels.

**METHODS:** Our study group was composed of 48 obese patients between the ages of 12-18 who were admitted to the Dicle University Medical Faculty Hospital Pediatric Endocrinology Outpatient Clinic between January-March 2021, diagnosed with primary obesity, and 49 healthy and volunteer controls who were matched in terms of age and gender. Accompanying psychopathologies were screened by using the "Kiddie Schedule for Affective Disorders and Schizophrenia-Present and Lifetime Version(K-SADS)" and by conducting clinical interviews based on DSM-5. Young's Internet Addiction Scale(YIAS), Addiction Profile Index-Internet Addiction Form (BAPINT), Smartphone Addiction Scale-Short Form(SAS-SF) to the patient and control groups; DSM-IV based Disruptive Behaviour Disorders Rating Scale (DBDRS) was given to their parents.

**RESULTS:** It was observed that the participants had similar family characteristics, socioeconomic and sociocultural levels. Obese adolescents were found to use the internet and smartphones for significantly longer periods of time, and snack more in front of the screen. Obese adolescents had significantly higher mean scores of YIAS, total BAPINT, SAS-SF and DBDRS. The average of YIAS scores was  $36,64 \pm 14,25$  in obese adolescents and  $28,79 \pm 6,54$  in the control group ( $p = 0,001$ ); the mean scores of the BAPINT scale were  $1,97 \pm 0,60$  in the obese group and  $1,41 \pm 0,49$  in the control group ( $p < 0,001$ ); the average of SAS-SF scale scores was  $26,68 \pm 11,78$  in obese adolescents and  $18,63 \pm 6,93$  in the control group ( $p < 0,001$ ).

**CONCLUSION:** Our study shows that obesity progresses with a high rate of internet/smartphone addiction and psychopathologies. Considering the difficulty of obesity treatment and the high number of complications, biopsychosocial interventions and multidisciplinary approaches involving mental health professionals are important for the prevention and treatment of pediatric obesity.

**Keywords:** obesity, internet addiction, smartphone Addiction, ADHD, child and adolescent



**[Abstract:0092] [Disruptive behavior disorders]****0092 - The Relationship between perceived stress, stress coping styles and eating behavior in obese candidates for bariatric surgery**Mert Gözen, Betül KurtSES Gürsoy

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Pearson Correlation	Restrained Eating	Emotional Eating	External Eating	Perceived Stress	Self-confident Approach	Helpless Approach	Submissive Approach	Optimistic Approach	Seeking Social Support
Restrained Eating	r 1 p								
Emotional Eating	r -.418* p .022	1							
External Eating	r -.353 p .056	.730** <.001	1						
Perceived Stress	r .053 p .779	.402* .028	.119 .531	1					
Self-confident Approach	r .138 p .467	-.454* .012	-.388* .034	-.519** .003	1				
Helpless Approach	r -.025 p .895	.529** .003	.351 .057	.462* .010	-.400* .029	1			
Submissive Approach	r -.267 p .154	.380* .039	.508** .004	.210 .266	-.193 .307	.542* .002	1		
Optimistic Approach	r .045 p .813	-.451* .012	-.450* .013	-.573** .001	.669** <.001	-.299 .108	-.255 .173	1	
Seeking Social Support	r -.069 p .718	-.350 .058	-.099 .602	-.335 .070	.453* .012	-.276 .140	.119 .529	.371* .044	1
BMI	r -.263 p .161	.090 .638	.220 .243	-.026 .891	-.076 .691	-.136 .475	.351 .057	.020 .915	.262 .161

**AIM:** The aim of the current study is to investigate the effects of perceived stress and stress coping styles on eating behavior in obese individuals who are candidates for bariatric surgery. The point to be emphasized with this study is that the effect of stress coping styles on eating behavior can be used in the treatment of obesity

**METHODS:** 30 obese patients who consulted to AFSU psychiatry outpatient clinic for preoperative evaluations between 15.06.2022-03.08.2022, and 30 age-matched healthy individuals who voluntarily agreed to participate in the study were included in the study. The perceived stress scale, stress coping style scale, and Dutch eating behavior questionnaire were applied to the participants together with the sociodemographic data form.

**RESULTS:** While no statistical difference was observed between the groups in terms of perceived stress and eating behavior, it was observed that obese individuals adopted the submissive approach, which is one of the maladaptive coping styles with stress ( $p=0.014$ ). In the correlation analysis performed in obese individuals, a positive correlation was found between perceived stress and emotional eating ( $r=0.402$   $p=0.028$ ). The helpless approach was correlated with emotional eating ( $r=0.529$   $p=0.003$ ) and the submissive approach was correlated with both emotional eating ( $r=0.380$   $p=0.039$ ) and external eating ( $r=0.508$   $p=0.004$ ). It was found that self-confident approach and optimistic approach, which are among adaptive coping styles with stress, were also inversely correlated with emotional eating and external eating.

**CONCLUSION:** As a result of the study, it was determined that the styles of coping with stress are effective in eating behavior. It has been observed that the submissive approach, which is especially effective on emotional and external eating attitudes, is adopted more in obese individuals than in healthy individuals. In conclusion, adding stress coping interventions to obesity treatment may increase the effectiveness of the treatment.

**Keywords:** obesity, coping style, perceived stress

### Correlations Between Eating Behavior, Perceived Stress, and Stress Coping Styles in Obese Group

*BMI: body mass index \*Correlation is significant at the 0.05 level (2-tailed) \*\*Correlation is significant at the 0.01 level (2-tailed)*

#### Demographic data and scale scores

	Obese Group (mean±s.d)	Healthy Controls (mean±s.d)	p
Gender / Female n(%)	18 (60%)	15 (50%)	
Gender / Male n(%)	12 (40%)	15 (50%)	
Age	37.1±10.9	32.0±7.8	0.474
BMI	41.6±6.5	23.4±3.7	<0.001**
Restrained Eating	25.6±7.1	24.5±6.8	0.619
Emotional Eating	33.8±13.5	30.0±13.3	0.247
External Eating	29.7±9.4	29.2±6.1	0.686
Perceived Stress	14.5±6.1	15.6±7.6	0.210
Self-confident Approach	22.9±4.2	22.0±3.9	0.247
Helpless Approach	16.9±5.7	16.5±4.2	0.211

Submissive Approach	12.6±2.9	10.9±2.9	0.014*
Optimistic Approach	15.3±2.7	14.7±2.9	0.103
Seeking Social Support	12.0±1.7	12.8±1.9	0.916

*BMI: body mass index \* p<0.05 \*\* p<0.001*

**[Abstract:0096] [Attention deficit hyperactivity disorder (ADHD)]**

**0096 - Evaluation of adult psychiatrists' attitudes and approaches towards adult attention deficit hyperactivity disorder: A preliminary study**

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**OBJECTIVE:** Attention Deficit Hyperactivity Disorder (ADHD) begins in childhood and continues into adolescence and adulthood. Insufficient recognition of the disorder can lead to treatment deficiencies, misdiagnosis, and serious functional losses in adults. Therefore, in our study, we aimed to evaluate the awareness, attitudes and approaches of adult psychiatrists about the diagnosis and treatment of adult ADHD.

**METHODS:** 65 adult psychiatrists who agreed to participate in the study with convenience sampling method were included and a questionnaire developed by the researchers was applied to the participants.

**RESULTS:** 58.5% of the physicians participating in the study were specialist physicians, 27.7% were research assistants, and 13.8% were academic staff. 56.9% of the participants were working in a university hospital or a training and research hospital, and 35.4% in a state hospital. While 89.2% of the participants saw 1-4 ADHD patients daily, 75.4% stated that they diagnosed 1-4 patients with ADHD. 33.8% of the participants reported that more than half of their patients were referred by a follow-up child and adolescent psychiatrist, 50.8% of them reported that more than half of their patients had received treatment before, and 33.8% of them reported that more than half of the patients had noticed the symptoms themselves. 73.8% of the participants reported that adult ADHD was partially recognized, and 78.5% of them reported that the predominant type of attention deficit in adulthood. 57% of them partially agreed that adult ADHD symptoms should be questioned, and 80% stated that adult ADHD should be treated. 44.6% of the participants stated that psychostimulants were the most effective treatment for adult ADHD, 61.5% for children and adolescents, and 49.2% preferred psychostimulants for treatment. The rate of those who thought that atomoxetine was effective in the treatment of adult ADHD was 46.2%, and the rate of those who thought it was a safe agent was 63.1%. %70.8% of the participants answered "yes" or "partially" to the question "Do you have difficulties in planning ADHD treatment?".

**CONCLUSION:** Adult psychiatrists have difficulties in planning adult ADHD treatment and it is thought that their knowledge, skills and awareness about adult ADHD should be increased.

**Keywords:** ADHD, attention-deficit, hyperactivity, treatment

[Abstract:0098] [Schizophrenia and other psychotic disorders]

**0098 - A mirror-image study in patients with schizophrenia spectrum disorders**

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**BACKGROUND and OBJECTIVE:** Medication adherence is essential for patients with schizophrenia spectrum disorder. This study aimed to assess the clinical consequences of oral versus long-acting injectable and depot antipsychotics in the same patients with schizophrenia spectrum disorders.

**METHODS:** This was a naturalistic, mirror-image study examining clinical course of patients 1 year pre- and 1 year post- long-acting injectable and depot antipsychotic initiation. Clinical data of the participants were collected from our psychiatry department records, retrospectively. Ethical Committee approval for the study was obtained from the Atatürk University Faculty of Medicine Clinical Research Ethical Committee.

**RESULTS:** A total of 30 patients ( n = 19, 63.3% with a diagnosis of schizophrenia and n=11, 26.7% with other diagnoses ) suffering from schizophrenia spectrum disorders were included. In the period with long acting and depot medication, hospitalization number ( z = -3.350, p = 0.001), total days of hospitalization ( z = -2,570, p = 0.010 ) was significantly lower than the period with oral antipsychotics. In terms of compliance with medication, in the long-acting and depot antipsychotic period, the compliance with medication was significantly higher than the oral antipsychotic period ( p= 0.007). Chlorpromazine equivalent doses of long-term and depot antipsychotics period were significantly higher than the oral antipsychotic period ( z = -3.424, p = 0.001 ). Considering the experience of side effects ( p = 0.581) and the need for anticholinergic usage ( p = 1.000) between two periods no significant difference was found.

**CONCLUSIONS:** It should be kept in mind that long acting and depot injection initiation was associated with reduced hospitalization and increased compliance in the same schizophrenia spectrum disorder patients. Additionally, despite with using significantly high antipsychotic dosages in the long-term and depot medication period, long-term injection and depot antipsychotic period was related with reduced experience of side effects and anticholinergic usage.

**Keywords:** schizophrenia, antipsychotic, mirror-image

**[Abstract:0099] [Addiction Psychiatry]**

**0099 - The Relationship between PTSD risk and relapse in patients with alcohol and substance use disorder**

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**BACKGROUND and OBJECTIVE:** In the literature, discrepant results have been reported in studies evaluating the effects of traumatic experiences on relapse. The aim of our research is to contribute to the literature by evaluating the relationship between PTSD risk and relapse. **METHODS:** This study was carried out in the Alcohol and Substance Treatment Center of Moodist Hospital in Istanbul/Turkiye between November 2019 – February 2020. A hundred and four patients who were hospitalized with the diagnosis of AUD/SUD and followed up for at least 3 months after discharge were included. The patients under the influence of alcohol or substance and the ones with psychotic symptoms were not included in the study. Addiction Profile Index Clinical Form and Kocaeli Mental Trauma Brief Screening Scale were applied to all participants during the hospitalization process.

**RESULTS:** Of the patients participating in the study, 15 (14%) were female, and 89 (86%) were male. During the 3-month follow-up period, 44 (42%) of 104 patients were found to have relapsed, and 60 people (58%) have not relapsed. At the same time, 29 (28%) of the people who participated in the study were found to be at risk of PTSD. It was found that 16 of the patients who did not relapse had a risk of PTSD (26.6%), while 44 patients were not at risk of PTSD (73.3%). It was determined that 13 patients who relapsed (29.5%) had a risk of PTSD, while 31 of them had no risk of PTSD (70.4%). When the effect of PTSD risk on relapse in individuals with alcohol substance use disorder was examined, it was found that there was no significant difference ( $\chi^2 = 0.05$   $p = 0.83$ ).

**CONCLUSION:** In conclusion, our findings add to the literature suggesting that the presence of PTSD risk is not associated with treatment failure in the short term.

**Keywords:** PTSD, substance use, alcohol use, relapse, trauma

**[Abstract:0102] [Autism Spectrum Disorders]**

**0102 - Dynamic thiol/disulfide homeostasis and other oxidative parameters in children with autism spectrum disorders**

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**OBJECTIVE:** The etiology of autism spectrum disorder (ASD) is not clearly understood, but it is suggested ASD is a multifactorial disorder caused by genetic, immunological and environmental factors that are associated with oxidative stress. Especially in recent years, studies have been about the damage of oxidative stress and free radicals in different brain areas of children with ASD. The aim of this study is to evaluate the role of oxidative stress on the

etiopathogenesis of autism with a novel oxidative stress marker, dynamic thiol/disulfide homeostasis, and total oxidant status (TOS), total antioxidant status (TAS), oxidative stress index (OSI), glutathione and glutathione peroxidase (GPx) and the relation of the symptom severities of autism with these plasma biomarkers.

**METHODS:** The study included 49 children aged 3-10 years who admitted Mersin University Medical Faculty Department of Child and Adolescent Psychiatry in August 2016 – August 2017, who was diagnosed with ASD according to DSM-V, and 31 healthy subjects matched for age and gender. Childhood autism rating scale (CARS) were used to investigate relationship between blood values and severity of autistic symptoms.

**RESULTS:** While native thiol (SH), reduced thiol ratio (SH/ToSH) and GPx levels were lower, total thiol (ToSH), disulfide (SS), oxidized thiol ratio (SS/ToSH), redox potential (thiol oxidation-reduction ratio; SS/SH), TOS, OSI and glutathione levels were higher in autism group; but these findings were not statistically significant. Also, there was not any statistically significant correlation between plasma biomarkers and symptom severities of autism. The age of father at birth of children with ASD were significantly higher than healthy controls. Mean age of children with mild to moderate ASD were significantly higher than children with severe ASD.

**CONCLUSIONS:** The current study reveals no association between pediatric-age ASD and thiol/disulfide homeostasis, TAS, TOS, OSI, glutathione and GPx. To clarify the relationship between oxidative stress and ASD, future methodologically robust studies including community-based samples and larger population is required.

**Keywords:** autism spectrum disorders, glutathione, glutathione peroxidase, oxidative stress, thiol/disulfide homeostasis

#### [Abstract:0106] [Autism Spectrum Disorders]

#### 0106 - Leptin, ghrelin, MCH, neurotensin and adiponectin levels in young children with autism spectrum disorder

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**OBJECTIVE:** Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by impaired social communication and repetitive behavioral patterns in early years of life. The etiology underlying ASD has not yet been clearly defined. Some studies suggest that appetite-regulating hormones may play a role in the etiopathogenesis of ASD. This study aimed to investigate the role of leptin, ghrelin, adiponectin, melanocyte concentrating hormone (MCH) and neurotensin in young children with ASD.

**METHODS:** A total of 40 children with ASD and 40 healthy controls aged 18–60 months were included. The diagnosis of ASD was made based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria. Symptom severity of the patients was determined by the Childhood Autism Rating Scale (CARS) and Autism Behavior List (ABC). Since appetite hormones are affected by circadian rhythm and nutritional processes, blood samples were taken between 8:30 and 10:00 in the morning after eight hours of fasting, on the morning of the psychiatric evaluation. Plasma levels of hormones were measured using commercial enzyme-linked immunosorbent assay kits.

**RESULTS:** Plasma neurotensin levels was significantly higher in the ASD group than in the control group. Plasma adiponectin levels was significantly lower in the ASD group than in the control group. However, no significant difference for plasma leptin, ghrelin, melanocyte concentrating hormone levels was detected between the groups.

**CONCLUSIONS:** In conclusion, this research suggests that adiponectin and neurotensin may play a role in the etiopathogenesis of ASD. Future studies with larger samples and more heterogeneous populations will increase data on whether decreased adiponectin and increased neurotensin levels are among the potential mechanisms of etiology in ASD.

**Keywords:** autism spectrum disorder, adiponectin, ghrelin, leptin, MCH, neurotensin

[Abstract:0108] [Obsessive-compulsive disorders (OCD)]

**0108 - Two-Year retrospective evaluation of patients with obsessive compulsive disorder and follow-up results in a child psychiatry clinic**

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**OBJECTIVE:** Childhood obsessive-compulsive disorder (OCD) has heterogeneous clinical presentation due to the diversity of variables such as comorbidity, age of onset, gender. In this study, we aimed to evaluate the patients diagnosed with OCD in Ondokuz Mayıs University Child Psychiatry Outpatient Clinic.

**METHODS:** Patients who applied to Ondokuz Mayıs University Child Psychiatry Outpatient Clinic between 01.01.2020 and 01.01.2022 and were diagnosed with OCD were identified by retrospective file scanning and their data were obtained using the Nucleus system. Data were analyzed with SPSS v21.0. The study has been approved by the Institutional Review Board of Ondokuz Mayıs University, number 2022/342.

**RESULTS:** Data of 57 OCD patients were obtained in total. It was observed that 59.6% of the patients were girls (n: 34), 40.4% were boys (n: 23), the mean age was  $11.8 \pm 3.7$  years, between 3-17 years. It was determined that the mean age of onset of OCD symptoms was  $11.2 \pm 3.1$  years, and the patients were diagnosed 1.4 years after the onset of symptoms; the average treatment period of the patients was 21.2 months and they visited the hospital an average of 6.6 times during this period. Sertraline was used in 59.6%, fluoxetine in 47.4%, risperidone in 28.1%, aripiprazole in 22.8%, and other drugs in 7.0% of the patients.

**CONCLUSIONS:** Although childhood OCD shows fluctuations, it's a condition requires treatment for years. With this information, it can be thought that the children in our study did not fulfill the drug use recommendation, since the hospital admissions were low compared to the duration of their treatment, and the age at diagnosis was quite later than the onset of symptoms. Similar to the literature, the most prescribed drugs in our study were selective SSRIs and the long-term effects of these drugs on OCD symptoms may explain this finding. In the light of these preliminary data, prospective and controlled studies on OCD in children and adolescents are needed.

**Keywords:** Adolescent, Child, OCD, Treatment

[Abstract:0109] [Others]

**0109 - What is the role of youtube as a source of information on premenstrual syndrome?**

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**OBJECTIVE:** Premenstrual Syndrome (PMS) symptoms are reported by 30-40% of women of reproductive age and require treatment. YouTube™ is increasingly being used to access health information all over the world. The purpose of this study is to assess the dependability and utility of PMS information available to patients on YouTube™.

**METHODS:** This was a cross-sectional study that looked at 62 videos. For the quality analysis of the videos, the Global Quality Score (GQS), modified DISCERN, and PMS youtube score (PMSYS) comprised of 10 parameters developed by us were used. The video duration (seconds), time since upload (months), and number of views/comments/likes/dislikes were all calculated.

**RESULTS:** Most of the videos (35.5%) were uploaded by doctors, and only a few were uploaded by hospitals (6.5%). The mean GQS score was  $2.03 \pm 1.33$ , the modified DISCERN score was  $2.05 \pm 1.31$ , and the PMSYS score was  $2.67 \pm 2.08$ . GQS scores 1-2 (low quality), 3 (medium quality), and 4-5 (high quality) were 66.1%, 14.5% and 19.4%, respectively. The vast majority of videos were rated as low quality.

**DISCUSSION:** The majority of the PMS-related video content reviewed was unsatisfactory. Insufficient information was provided about symptoms and treatment options. It is critical to upload informative and high-quality videos about PMS, which is common in women, as well as to establish content control mechanisms for existing videos.

**Ethics:** We did not apply to any medical ethics committee for approval. The study according to the World Medical Association Declaration of Helsinki, as no patient data or materials were used and all videos used for the study are available on a public social media website (YouTube).

**Keywords:** Premenstrual Syndrome information, Youtube video, Quality

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[Abstract:0112] [Autism Spectrum Disorders]

**0112 - Investigation of complementary and alternative medicine applications in autism spectrum disorders**

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**OBJECTIVE:** There is no medical treatment that has a curative effect on the main symptoms of autism spectrum disorder (ASD). This leads to more use of complementary and alternative medicine (CAM) strategies in ASD. However, comprehensive studies on CAM practices in families of children with ASD are scarce in Turkey. In this study, we aim to investigate the CAM applications used in children with ASD.

**METHODS:** One hundred and forty-nine children with ASD (106 males, 43 females, mean age 8.71±2.81 years, min-max:4-16 years) participated in the study. Data on the use of CAM were collected with a specially prepared questionnaire.

**RESULTS:** The frequency of using any CAM application was 82.6% (n=123). CAM methods were divided into two biologically based and non-biologically based applications. Intake of omega-3 fatty acids (50.3%) was the most common biological application and spiritual and religious practices (42.3%) were the most common non-biological methods. Information regarding CAM was most frequently obtained from doctors (27.5%). The most common reason for using CAM was to enhance speech-language abilities (80.5%). 58.5% of CAM users did not report any benefit, 10.6% reported benefit, and 30.9% reported partial benefit. The greatest benefits were reported for behavior problems, hyperactivity, and sleep problems. 24.4% of CAM users reported side effects, the most common side effect was GIS symptoms. The frequency of CAM applications causing additional economic burden was 48.8%.

**CONCLUSIONS:** Results indicated that children with ASD use CAMs incredibly often. Given the extremely high use of CAMs and the scarcity of information regarding safety and effectiveness, healthcare professionals dealing with children with ASD need to educate families of children with ASD about CAMs.

**Keywords:** Autism, autism spectrum disorders, complementary and alternative medicine, treatment

**[Abstract:0119] [Mood disorders]****0119 - Sociodemographic variables affecting postpartum depression symptoms: a preliminary study**

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**OBJECTIVE:** Early identification and treatment who are prone to postpartum depression will be helpful in minimizing the long-term adverse effects of the disease. For this reason, it is important to know the risk factors that predispose to the development of postpartum depression and to closely monitor the mothers who may be at risk. Factors such as weak family and marital relations, lack of social support, low socioeconomic level, and low education level are thought to pose a risk for postpartum depression. In this study, it was aimed to determine the risk factors for postpartum depression, which is a mental illness that is often neglected by health professionals and requires treatment, and to emphasize the importance of psychological follow-up in the postpartum period.

**METHOD:** 40 patients who had a live birth at Kızılcahamam State Hospital between January-December 2021, who were not diagnosed with psychiatric disease in the prenatal period, who were in the postpartum period between 2-6 months, were selected for the study. A questionnaire form was used to determine the sociodemographic and obstetric characteristics of the mothers, and the Edinburgh Postpartum Depression Scale (EPDS) was used. The cut-off point in EPDS was taken as 10. Statistical data were made using SPSS 25.0. Since the quantitative data conformed to the normal distribution, Student's t test was used to compare the means, and Pearson's correlation analysis was used for correlation.  $p < 0.05$  was accepted as statistical significance.

**RESULTS:** In our study, the mean age of the participants was  $29.8 \pm 5.00$ , the year of education was  $11.30 \pm 3.65$ , the apgar score was  $8.92 \pm 0.57$ , the number of children was  $2.37 \pm 1.10$ , the EPDS was  $4.30 \pm 3.77$ . 17.5% (n:7) of the participants were smokers, 27.5% had at least 1 additional disease. The vast majority (92.5%) used C/S as the mode of delivery. When EPDS cut-off score was taken as 10, 12.5% (n:5) of sample was evaluated as postpartum depression. When the postpartum depression group was compared with the group without it, the mean age, apgar score and number of children were similar. The years of education were significantly lower in the postpartum depression group ( $p < 0.001$  t:3.88). A negative significant correlation was found between education year and EPDS ( $r: -0.57$   $p < 0.001$ ).

**CONCLUSION:** In our study, it was found that as the education level of the mother decreased, she showed more depressive symptoms. This situation has been found similarly in other studies and it has been stated that women with insufficient education level may have lower self-esteem in low social life and may experience difficulties in coping with more stress and the difficulties of being a mother.

Although it is restrictive that our study was in a single center with a small number of participants, it is important in terms of reaching all pregnant women in a small town and screening them for depression.

As a result, it is important to follow the pregnant women and mothers in the postpartum period from the biopsychosocial point of view, it is seen that close observation of individuals with low education level in terms of postpartum is important.

**Keywords:** postpartum, depression, pregnancy, risk factors, education level

**[Abstract:0131] [Autism Spectrum Disorders]**

**0131 - Sluggish cognitive tempo symptoms in children and adolescents with mild autism: investigating associated individual and familial factors and comparing to children and adolescents with attention deficit hyperactivity disorder**

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**OBJECTIVE:** The frequency of Sluggish Cognitive Tempo (SCT) and associated factors in mild autism, which was defined as Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) in previous diagnostical classification, has not been studied yet. We aim to investigate the frequency of SCT and associated factors in children and adolescents with mild autism and compare to children and adolescents with Attention Deficit-Hyperactivity Disorder (ADHD).

**METHOD:** 51 patients (mean 10.9 years and 84.3% male) diagnosed with mild autism according to DSM-V and age and sex matched 51 ADHD controls were included. Barkley Sluggish Cognitive Tempo Scale (BSCTS), Conners' Parent Rating Scale (CPRS), Conners' Teacher Rating Scale (CTRS), Turgay DSM-IV-Based Child and Adolescent Disruptive Behavioral Disorders Screening and Rating Scale (T-DSM-IV-S) and Screen for Child Anxiety Related Emotional Disorders (SCARED) were administered to all participants but Childhood Autism Rating Scale (CARS), Autism Behavior Checklist (ABC) and Aberrant Behavior Checklist (AbBC) were administered only to mild autism group.. BSCTS and T-DSM-IV-S were administered both teacher and parent in whole groups. BSCTS was used to measure SCT symptoms.

**RESULTS:** The frequency of SCT was 47.0% in mild autism and 31.3% in ADHD. In terms of SCT frequency, no statistically significant difference was found between groups ( $p=0.1$ ). In mild autism group; total score of CPRS, anxious subscale score of CPRS, hyperactivity subscale score of CTRS, hyperactivity subscale score of T-DSM-IV-S-teacher were significantly higher whereas inattention subscale score of T-DSM-IV-S-parent was significantly lower compared to the ADHD group. In cases with SCT in mild autism group; ABC total score, ABC relating subscale score, AbBC total score, AbBC lethargy subscale score, BSCTS-parent score, CPRS total score, CPRS anxious subscale score, CPRS psychosomatic subscale score, T-DSM-IV-S-parent total score and hyperactivity subscale score, SCARED total and all subscales scores were found significantly higher compared to cases without SCT in mild autism group. Furthermore, significant associations and correlations were found between SCT total score and ABC total, ABC sensory stimuli subscale, ABC relating subscale, AbBC total, AbBC irritability subscale, AbBC lethargy subscale, CPRS total, CPRS conduct problem, CPRS learning problem, CPRS anxious subscale, CPRS psychosomatic, T-DSM-IV-S-parent total score, T-DSM-IV-S-parent inattention subscale, T-DSM-IV-S-parent conduct disorder subscale, SCARED total, SCARED school phobia subscale, SCARED psychosomatic subscale and SCARED social phobia subscale scores. According to linear regression model which included positive correlations, we found that: ABC total, T-DSM-IV-S-parent inattention subscale and CPRS total scores

predicted SCT total score.  
**CONCLUSION:** In our study, we found that SCT was highly frequent in mild autism cases and associated with autism symptoms, ADHD, anxiety and behavioral symptoms. Hereby, screening of SCT symptoms in mild level ASD cases and arranging treatment considering SCT as a factor in etiology would be beneficial. In conclusion, further studies with large samples are needed in order to determine specific symptoms and correlates of SCT in mild autism cases.

**Keywords:** Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, Sluggish Cognitive Tempo.

**[Abstract:0132] [Addiction Psychiatry]**

**0132 - The Relationship between smartphone use and sleep, body mass index, and quality of life**

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**OBJECTIVE:** Smartphones are used for communication, games, and internet in every moments. They are thought to affect sleep and eating routines of adolescents. In this cross-sectional study sleep, body mass index and quality of life (QoL) of adolescents who were at high risk of phone addiction were compared with those of adolescents who were at low risk of phone addiction.

**METHODS:** 165 adolescents (aged 12-18 years; n:98, 59.4% girls), who admitted to the child and adolescent clinic, were evaluated with Smartphone Addiction Scale (SAS), Pittsburgh Sleep Quality Index (PUKI), and Quality of Life Scale (QoLS). Body mass index (BMI) was calculated. High risk of phone addiction was determined by SAS score (higher scores means high addiction risk).

**RESULTS:** The PUKI scores were higher (low sleep quality) while the QoLS scores were lower (low QoL) in adolescents with high risk of phone addiction. There was no correlation between BMI and SAS score.

**CONCLUSION:** QoL is the general marker of well-being, and sleep is one the major markers of QoL. It is thought that the relations between sleep, QoL and smartphone addiction are reciprocal. This study was performed in a clinical sample, so low QoL and sleep quality could be due to psychopathologies. But overuse of smartphone by adolescents is a common complaint of parents, so to determine whether this complaint is a real risk of smartphone addiction and to treat it could effect the sleep and QoL in some degree.

**Keywords:** Smartphone, addiction, sleep, quality of life

[Abstract:0142] [Addiction Psychiatry]

**0142 - Psychopathy and its relation with borderline personality traits in women with substance use disorder**

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**OBJECTIVE:** Although substance use disorders remain more prevalent in men than in women, the gender gap has been narrowing overall at an increasing rate worldwide. Certain clinical characteristics that are associated with treatment outcomes often vary by gender. Personality traits and its effects may differentially affect men and women, some specific variables can be more significant for women's treatment requirements.

Therefore in this study, we aimed to assess psychopathy in women with substance disorder and its association with borderline personality traits.

**METHODS:** This study was planned as a cross-sectional study and female patients with substance use disorder were enrolled from the outpatient treatment clinic (OTC). The database was reviewed in August 2022 to identify the study sample who admitted to the OTC between September 2021 and August 2022. Patients were assessed with semi-structural data form, borderline personality questionnaire (BPQ) and Levenson Self-Report Psychopathy Scale (LSRP).

This study protocol was reviewed and approved by the Ethics Committee of Antalya Research and Training Hospital, approval number 2022/04. All statistical analyses were performed with - SPSS (version 26.0, IBM) and included descriptive statistics, chi-square and one-way analysis of variance tests. The level of significance was determined using the.05 level.

**RESULTS:** Sample included 84 women with a mean age of  $25.9 \pm 6.4$  years. The majority of group ( % 38.1) were separated/divorced and were living with the family ( % 85.7 ). Almost four-fifths were unemployed ( % 82.1 ). % 53.3 of participants were in psychopathic group with a mean LSRP score of  $66.1 \pm 1.1$ .

Analyses based on three different psychopathy levels showed that psychopathic patients showed higher levels of BPQ scores (  $p < 0.001$  ), impulsivity subscale scores (  $p = 0.008$  ), affective instability subscale scores (  $p < 0.001$  ), relationships subscale scores (  $p = 0.01$  ), self-image subscale scores (  $p = 0.001$  ), emptiness subscale scores (  $p < 0.001$  ), intense anger and psychotic states subscale scores (  $p < 0.001$ , both ).

**CONCLUSIONS:** This study showed that psychopathic traits were associated with borderline traits in women with personality disorders. Given that personality disorder comorbidities may play a confounding role in treatment process, we underscore that clinicians must examine personality disorders in women with substance use and development of tailored treatment strategies may be of greater benefit than traditional programs.

**Keywords:** psychopathy, women, substance, borderline

[Abstract:0148] [Mood disorders]

**0148 - Association between biological rhythm and psychosocial functionality in patients with bipolar affective disorder type 1 and their healthy first degree relatives**

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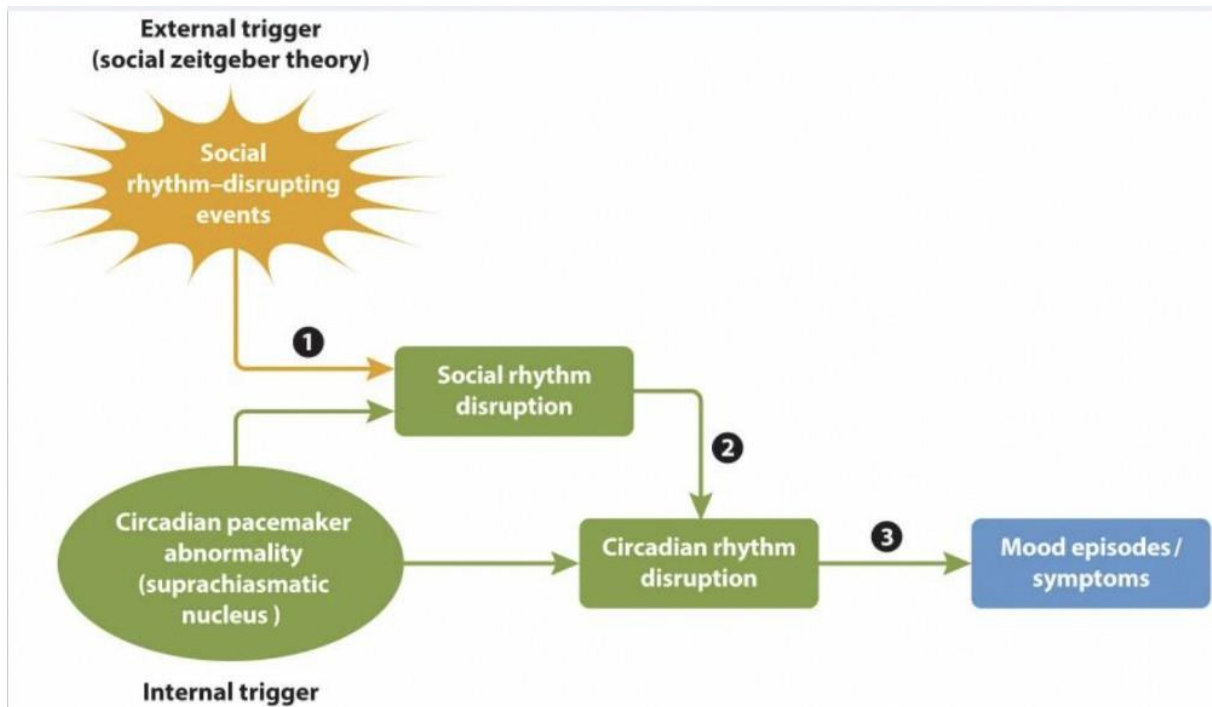
**BACKGROUND and OBJECTIVE:** In this study, it is aimed to examine the relationship between the deterioration of biological rhythm and psychosocial functionality among patients with Bipolar Disorder-1 (BD-1), their healthy first-degree relatives, and the control group. **METHODS:** This is a cross-sectional study consisting of 64 BD patients, 64 healthy first-degree relatives and 64 healthy controls. Sociodemographic and clinic information form, Biological Rhythms Interview of Assessment in Neuropsychiatry (BRİAN), Morning-Evening Questionnaire (MEQ), Functioning Assessment Short Test (FAST), Hamilton Depression Rating Scale (HAM-D) and Young Mania Rating Scale (YMRS) were applied to the BB group. Sociodemographic information form, BRİAN, MEQ and FAST were applied to the healthy control group. Institutional ethical approval was obtained. (Ethics committee application number: 2021 000257-1)

**RESULTS:** In our study, it was observed that the BRİAN total scale scores of the BD patients were higher than the control groups, that is, the biological rhythms of the BD patients were more disturbed than the control group. When the chronotypes were compared between the groups, the BD group showed a higher rate of morning type (39.1%) and evening type (31.3%) chronotype features and a lower rate of intermediate type (29.7%) than the patient relatives and healthy controls. When the biological rhythm irregularity was compared between the chronotypes in the patient group, it was determined that the BRİAN total scores of the individuals with the evening chronotype were higher, that is, the biological rhythms of the individuals with the evening chronotype were found to be more disturbed. When the functionality between chronotypes was compared in our patient group, it was observed that there was a higher rate of impairment in total functionality in the evening type than in the intermediate type. When the relationship between functionality and biological rhythm irregularity was examined in our patient group, it was observed that there was a relationship between total disorder and total impairment in functionality. When the functionality between chronotypes was compared in the relatives of patients with bipolar disorder, no statistically significant difference was found between the groups. Sociodemographic and clinical features affecting biological rhythm irregularity in the patient group were evaluated by linear regression analysis; As a result of the analysis, it was determined that the presence of a biological rhythm disorder was associated with the lack of complete remission of the disease.

**CONCLUSION:** Our research provides valuable information about the relationship between biological arrhythmias and psychosocial functioning in BD patients. In the light of the research data, it suggests that the biological rhythm irregularity detected in BD patients may be an independent predictor of low psychosocial functionality. Our research supports that therapeutic interventions targeting circadian rhythm stability have an important place in the acute and long-term management of BD.

**Keywords:** Bipolar Disorder, Biological Rhythm, Psychosocial Functionality

figure 1



*Social rhythm theory in mood disorder*

**[Abstract:0149] [Disruptive behavior disorders]**

**0149 - The Relationship between perceived peer bullying and post-traumatic stress disorder symptoms in school-age children**

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**OBJECTIVE:** Peer bullying is a type of violence that leaves traces on those who experience it both at the time and in the future. The frequency of peer bullying in childhood varies greatly according to age, region and country. Although peer bullying is not a new problem, it has been studied in our country since the 2000s. The risk factors and the problems they cause are still poorly understood. In our study, it was aimed to determine the bully and victim cases in school-age children, to determine the prevalence of peer bullying in the clinical sample, to reveal the factors accompanying the peer bullying, and to detect possible post-traumatic stress disorder symptoms in the bullied cases.

**METHODS:** School-age children between the ages of 8 and 12 who applied to our outpatient clinic and met the inclusion criteria and their parents were included in the study. The children aged 8-12 who volunteered to participate in the study were asked to complete the Olweus Peer Bully/Victim Questionnaire and the Child Posttraumatic Stress Reaction Index (CPTS-RI). Parents were asked to fill out the sociodemographic data form and the Strengths and Difficulties Questionnaire (SDQ).

The subjects participating in the study were divided into 4 groups as victim, bully, bully/victim, and none by the Olweus Peer Bully/Victim Questionnaire for Students. Statistical analysis of the dependent and independent variables investigated in the study was performed using the SPSS 17.0 package program.

**RESULTS:** Of the 115 adolescents, 43.5% were girls, 56.5% were boys, and the mean age was 10.3 years. Of the cases, 3.5% were bullies, 31.3% were victims, 7% were both bully+ victim, and the remaining 58.3% were none of these.

While the total median distributions of CPTS-RI were similar between the bully and none group, similar between the bully and both the bully and the victim group, and similar between the victim and the bully and the victim group ( $p > .05$  for all), significant differences were found in the victim vs. none group comparison (29 vs. 18;  $z = -3.318$ ,  $p = .001$ ) and in both the bully and victim vs. none group comparison (40 vs. 18;  $z = -3.255$ ,  $p = .001$ ).

The total mean distributions of the SDQ scales evaluated by the parents of the four groups were found to be similar to each other ( $F(3,111) = 2.423$ ,  $p = .070$ ).

There was a positive, moderately strong and statistically significant correlation between CPTS-RI scores and SDQ total scores (Spearman  $\rho = .355$ ,  $p < .001$ ).

**CONCLUSIONS:** According to the preliminary findings of our study, it can be thought that being exposed to peer bullying and both perpetrating and being exposed to this bullying are an important risk factor for experiencing PTSD symptoms compared to children who have never encountered it. The increase in the level of trauma perceived by the child with the difficulties observed by the parent suggests that bullying may negatively affect the child's functionality. A larger sample size is needed to generalize the other findings of the study.

**Keywords:** bullying, victim, peer, Olweus, School-age children, violence

**Table 1**

Table 1. Comparison of the variables of four classes

	Bully (B) n = 4	Victim (V) n = 36	B + V n = 8	None n = 67	Statistic F or $\chi^2$	p value
Age (year) <sup>a</sup>	10.2 (0.9)	10.2 (1.5)	9.5 (0.9)	10.4 (1.4)	0.795	.499
Sex, n (%)					1.297*	.781
Girl	2 (50.0)	16 (44.4)	2 (25.0)	30 (44.8)		
Boy	2 (50.0)	20 (55.6)	6 (75.0)	37 (55.2)		
CPTS-RI total <sup>b</sup>	22 (42)	29 (30)	40 (29)	18 (21)	18.37	.000
SDQ total <sup>c</sup>	18.0 (2.9)	17.6 (7.3)	18.2 (5.0)	14.4 (6.4)	2.423	.070

<sup>a</sup>: Mean (standard deviation)

<sup>b</sup>: Median (interquartile range)

\*: Fisher's exact test

$\chi^2$ : Pearson or Kruskal Wallis  $\chi^2$  (where appropriate)

CPTS-RI: Child Posttraumatic Stress Reaction Index

SDQ: Strengths and Difficulties Questionnaire

*Comparison of the variables of four classes*

**[Abstract:0150] [Others]**

**0150 - Factors related to job engagement in young physicians**

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Factors related to job engagement in young physicians



**INTRODUCTION:** With the pandemic, the workload of physicians has increased, and together with the economic and social problems, burnout has emerged in physicians. Burnout may be related to job engagement decreases. Healthcare professionals working at the forefront during the pandemic process experience anxiety, depression, acute stress, and sleep problems. (Aloğlu & Gecdi,; Elbay et al., 2020; Ing et al., 2020; Pappa et al., 2020; Uyurdağ et al., 2021). This study aims to evaluate related to job engagement in young physicians

**METHOD:** Google forms are used to reach the participants. 75 physicians who are under the age of 30 were reached. Data were obtained by a demographic data form and Utrecht work engagement Scale-6 (UWES-6). UWES-6 is a self-report form and has 6 items to measure work engagement with three subdimension as subscales: vigor, dedication, and absorption. Güler et al. developed the Turkish version was developed from UWES-9, which was developed by Schaufeli and Salanova (Güler et al., 2019; Schaufeli et al., 2006)

**RESULTS:** Data were evaluated using Jamovi 2.0.0.0. The increase in weekly working hours, the increase in the number of night shifts and the history of psychiatric illness are associated with a decrease in job engagement ( $p < 0.05$ ).

**CONCLUSION:** As a result, long working hours are associated with reduced job engagement. It can be said that young physicians need arrangements for working hours. In addition, the relationship between a history of psychiatric disorder and job engagement may need further research. Some transdiagnostic processes that cause a predisposition to psychiatric diseases may affect job engagement. The major limitation of this study is the relatively small sample size and the absence of a control group.

**Keywords:** Health Personnel, Physicians, Burnout, Mental Disorders, Physicians, job engagement, burnout

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[Abstract:0154] [Others]

**0154 - Anticipatory grief, anxiety and depression in caregivers of lung cancers patients**

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**INTRODUCTION:** Caregivers of persons with cancers can experience loss and grief long before the death of the person. The aim of this study is to evaluate the anticipatory grief of caregivers of lung cancer patients and to examine the relationship between grief reactions and anxiety and depressive symptoms.

**METHOD:** The study included 60 lung cancer patients caregivers who filled the Marwit-Meuser Caregiver Grief Inventory-Short Form (MMCGI-SF) and the Hospital Anxiety and Depression Scale(HADS).

**RESULTS:** Mean age of the caregivers were  $42.10 \pm 12.33$ . Relation of the caregivers to the patients were as; 13 (26%) partner, 26 (52%) children, 3 (6%) parent, 6 (12%) sibling and 1 (2%) unrelated. Distribution of the grade of lung cancer among patients were; grade 1 (4%), grade 2 (14%), grade 3 (20%), and grade 4 (62%). 20 (%40) of the patients had evaluated as ASAD positive. Mean value of HADS depression score was  $8 \pm 4.18$  and HADS anxiety was  $8.04 \pm 4.37$ . Mean value of MMCGI scale scores was  $2.64 \pm 1.02$ . Mean MMCGI scale scores were correlated with HADS depression scores ( $r= 0.556$ ,  $p= 0.001$ ), HADS anxiety scores ( $r= 0.667$ ,  $p= 0.001$ ), and ASAD scale scores ( $r= 0.705$ ,  $p= 0.001$ ). When compared; mean MMCGI ( $U= 62$ ,  $p= 0.001$ ), HADS depression ( $U= 129.5$ ,  $p= 0.001$ ), and HADS anxiety ( $U= 64$ ,  $p= 0.001$ ) were higher in ASAD positive caregivers than ASAD negatives.

**CONCLUSIONS:** The findings highlight the need to identify and address caregiver anticipatory grief in cancer services. They present a window of opportunity to improve caregiving outcomes.

**Keywords:** Anticipatory Grief, Anxiety, Depression, Caregivers

[Abstract:0158] [Disruptive behavior disorders]

**0158 - Evaluation of socioeconomically disadvantaged adolescents hospitalized in the intensive care unit for suicide attempts**

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**OBJECTIVE:** Suicide is a serious public health problem, especially in adolescents, since it is the fourth leading cause of mortality among 15-19 year-olds. Unfortunately, our knowledge regarding socioeconomically disadvantaged suicidal adolescents is relatively scarce as most of the research has been carried out in developed regions. Thus, the goal of this study was to evaluate suicide-attempted adolescents living in unfavorable socio-economic conditions in order to identify predisposing and protective factors.

**METHODS:** The cases who applied to the emergency department due to attempted suicide by taking drugs were hospitalized in the Intensive Care Unit after the completion of their initial evaluation and interventions. Among those, thirty-nine adolescents aged 13-17, who were found to be socioeconomically disadvantaged, agreed to participate in our study. In purpose of evaluating adolescents, Socio-Economic Status Scale and Youth Self-Report were used; additionally, a semi-structured scale, Columbia Suicide Severity Rating Scale (C-SSRS) was administered to adolescents in order to assess their suicidality.

**RESULTS:** 94.9% of the adolescents presenting with a suicide attempt were girls; 56.4% of attempts were impulsive, and 23.1% were planned; 7.3% of adolescents had no remorse for their suicide attempt; 38.5% had a previous history of a suicide attempt. Correlation analyses showed that age ( $r=0,352$ ;  $p=0,028$ ) and previous history of suicide ( $r=0,842$ ;  $p=0,000$ ) was positively associated with intensity of suicidal ideation. Besides, post-traumatic stress problems scores were strongly correlated with suicidal behaviors ( $r=0,714$ ;  $p=0,000$ ). Finally, linear regression analyses indicated that the feeling of loneliness, greater externalizing problems, and poorer socioeconomic status predicted the intensity of suicidal ideation.

**CONCLUSIONS:** Many socio-economically disadvantaged adolescents are at risk for psychopathologies as they have to cope with various difficulties, and their suicidal attempts often mean a call for help. Consequently, it carries great importance to recognize these difficulties at an early stage and to establish preventive and protective support mechanisms.

**Keywords:** Adolescent Suicides, Evaluation, Risk Factors, Socioeconomical Disadvantage, Suicide

[Abstract:0159] [Addiction Psychiatry]

### 0159 - The Problematic smartphone use and related psychopathologies in adolescents

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**OBJECTIVE:** Smartphone addiction is associated with many psychopathologies. In this cross-sectional study compared the difference in psychopathologies between the adolescents with high risk of phone addiction with those of adolescents who were at low risk of phone addiction.

**METHODS:** 165 adolescents (aged 12-18 years;  $n=98$ , 59.4% girls), who admitted to the child and adolescent clinic were evaluated with Smartphone Addiction Scale (SAS) to determine the risk of high phone addiction (higher scores means high addiction risk, the cut-off point was 100). All adolescents and their parents were interviewed using Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL) in order to evaluate psychiatric disorders. All parents completed the Conners' Parent Rating Scale (CPRS).

**RESULTS:** Adolescent with high risk of phone addiction had more psychopathologies in present. Mood disorders is the most common, and the most common type is major depressive disorder (MDD). Attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) were also common in highly risk group. Total score and all subscales scores of CPRS (conduct problem, learning problem, anxiety, impulsivity/hyperactivity, psychosomatic feelings) were significantly more in highly risk addiction group.

**CONCLUSION:** This study showed that problematic smartphone use was associated with many psychological symptoms. There is no any diagnostic criteria of phone addiction in DSM-

5 yet, but it could be a transdiagnostic factor of MDD, ADHD and ODD and could be one of the markers of dysregulated emotional regulation or disadaptive ways of coping.

**Keywords:** Adolescents, phone, psychopathology, addiction

[Abstract:0160] [Others]

### **0160 - Dead man walking: Anticipatory grief among lung cancer patients**

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**INTRODUCTION:** Many people experience anticipatory grief prior to the physical death. In chronic and fatal diseases such as cancer, signs of grief are often overlooked. In this study, it was aimed to evaluate the anticipatory grief and to investigate its relationship with anxiety and depression in lung cancer patients.

**METHOD:** The study included 60 lung cancer patients who filled the Prolonged Grief Disorder Scale- Turkish version (PGD) and the Hospital Anxiety and Depression Scale (HADS).

**RESULTS:** Mean age of the caregivers were  $66.44 \pm 9.06$ . Distribution of the grade of lung cancer among patients were; grade 1 (3.3%), grade 2 (18.3%), grade 3 (11.7%), and grade 4 (66.7%). 28 (46.7%) of the patients had evaluated as ASAD positive. Mean value of HADS depression score was  $7.94 \pm 4.91$  and HADS anxiety was  $7.57 \pm 5.16$ . By using the criteria for diagnosis according PG-12, Prolonged Grief Disorder was diagnosed in 23 (38.3%) of the patients. ASAD was found significantly higher among patients who were diagnosed as PGD ( $\chi^2=8.604$ ,  $p=0.003$ ). When compared; HADS depression ( $U=225.5$ ,  $p=0.002$ ), and HADS anxiety ( $U=151$ ,  $p=0.001$ ) were higher in ASAD positive patients. Also HADS depression ( $U=225$ ,  $p=0.005$ ), and HADS anxiety ( $U=203.5$ ,  $p=0.002$ ) were higher in PGD positive patients.

**CONCLUSIONS:** Recognition of anticipatory grief in cancer patients is important so that these patients can receive appropriate support and treatment. It is thought that our study will form the basis of studies to be carried out in this field.

**Keywords:** anticipatory grief, cancer, depression, anxiety

[Abstract:0162] [Addiction Psychiatry]

**0162 - The difference in the level of psychological stigmatisation between patients who applied to the alcohol and substance addiction research, treatment and training centre outpatient clinic and other psychiatry outpatient clinics**

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**BACKGROUND:** It is reported that stigmatization of mental illnesses is widely observed all over the world and causes a series of negativities in the lives of people who are stigmatized (1). Patients with alcohol/substance use disorders are among the disease groups which are most exposed to stigmatization within the mental disorders (2). We aimed to reveal the difference in the level of mental stigma between patients who applied to the Alcohol and Substance Addiction Research, Treatment and Training Centre (ASATC) outpatient clinic and other psychiatry outpatient clinics for the first time, and to reveal the factors associated with this level.

**METHODS:** Among the patients admitted to ASATC, the first 50 patients who met the inclusion criteria and 50 patients who were first admitted to non- ASATC psychiatry outpatient clinics, were age-matched and met the inclusion criteria were included in the study. Patients were asked to fill in the sociodemographic information form, Symptom Checklis (SCL) -90, and internalized stigma scales.

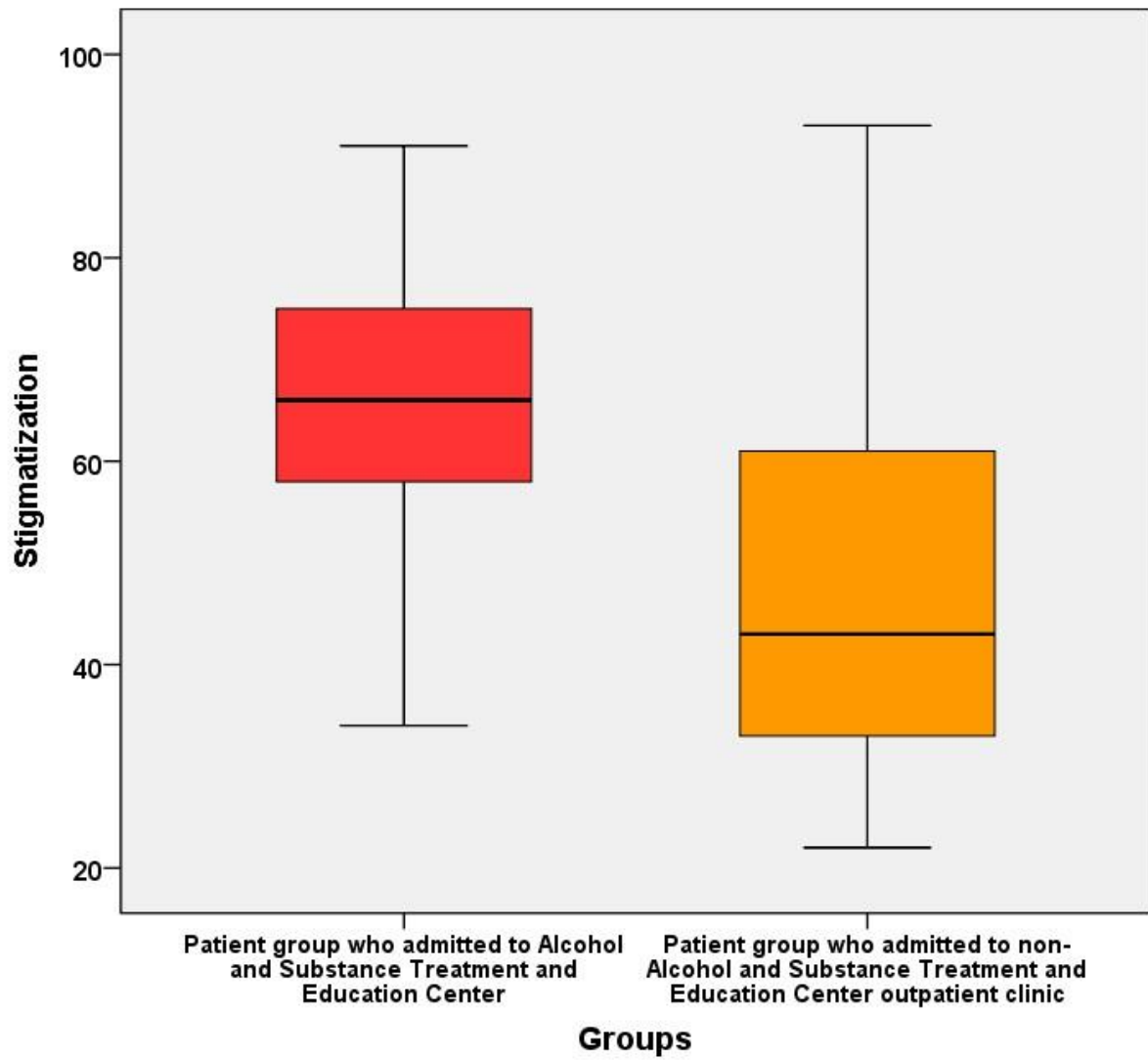
**RESULTS:** Of the 100 patients included in the study, 21% (n=21) were female and 79% (n=79) were male. The mean age of the patients was  $34.2 \pm 11.49$  (18-65). Stigma scores of patients admitted to ASATC were significantly higher than patients admitted to non- ASATC outpatient clinics ( $P < 0.001$ ). Stigmatisation scores were significantly correlated with dependency duration and SCL-90 scores ( $r = 0.196$ ,  $P = 0.049$ ;  $r = 0.465$ ,  $P < 0.001$ ).

**CONCLUSIONS:** In the research conducted by the World Health Organization (WHO), it has been shown that alcohol and substance use disorders are the diseases that cause the most stigmatization all over the World (3). Considering the fact that internalized stigmatization is also associated with the stigmatizing beliefs of the society, the fact that we found higher levels of internalized stigma in patients who applied to ASATC can be considered compatible with the literature. Although there is no research in the literature that associates the duration of addiction with the stigma score, we thought that the longer the exposure to social stigma, the more internalized this situation.

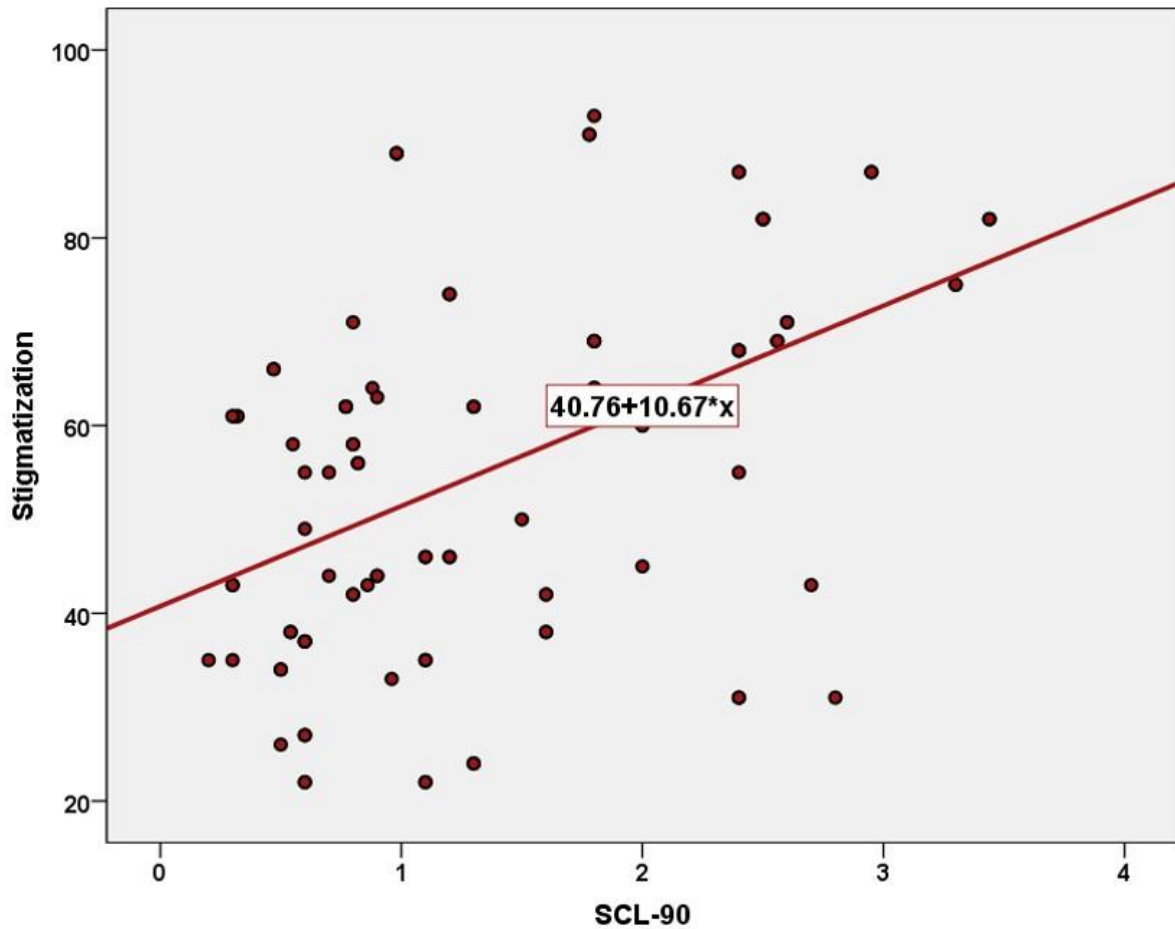
It has been claimed that the stigmatization of individuals with substance use disorders stems from the belief that they have severe personality defects and that these patients have a low chance of being treated (4). We believe that the relationship between SCL-90 scores and internalized stigma scores can be explained by considering the stigmatizing attitude towards the type of disease that society considers "severe".

**Keywords:** Alcohol addcition, substance addiction, stigmatisation

**Figure 1. Boxplot showing the distribution of stigma scores among groups**



**Figure 2. Scatterplot showing the relationship between stigmatization and SCL-90 scores**



**Table 1. Comparison of demographic characteristics and clinical information among research groups**

		Patient group who admitted to ASATC (n=50)	Patient group who admitted to non- ASATC outpatient clinic (n=50)	P values
Sex	Female	6 (12%)	15 (30%)	0.027a
	Male	44 (88%)	35 (70%)	
Marital status	Single	20 (40%)	16 (32%)	0.405a
	Married	30 (60%)	34 (68%)	
Education level	Primary school	30 (60%)	27 (54%)	0.513a
	High school	15 (30%)	14 (68%)	
	University	5 (10%)	9 (18%)	
Substance use	Alcohol	32 (64%)	0	-
	Heroin	4 (8%)	0	
	Multi-item	14 (28%)	0	
Age		35.26±11.57	33.14±11.43	0.359b

Duration of alcohol/substance dependence	5 (3.75 - 10)	1 (1 - 3)	<0.001c
Stigmatization	66 (57.5 - 76.75)	43 (32.5 - 61)	<0.001c
SCL-90	0.98 (0.77 - 2.4)	1.1 (0.6 - 1.8)	0.479c

*a*Chi-square test with *n* (%) *b*Student's *t*-test with mean±standard deviation *c*Mann-Whitney *U* test with median (quartiles: Q1-Q3) ASATC: Alcohol and Substance Addiction Research, Treatment and Training Centre

**Table 2. Correlation analysis between stigmatization scores and age, dependency period and SCL-90 scores**

	Age	Dependency period	SCL-90
Stigmatization	r: 0.145	r: 0.196*	r: 0.465*
	p: 0.151	p: 0.049	p: <0.001

\*Spearman's rho correlation is significant at the 0.05 level

**Table 3. Comparison of stigmatization scores according to sex and education levels**

		Stigmatization Median (Q1, Q3)	P values
Sex	Female	62 (43.5 – 75)	0.381a
	Male	56 (38 – 68)	
Education level	Primary school	61 (37 - 69)	0.200b
	High school	55 (43 – 69.5)	
	University	41 (34 – 59.25)	

*a*:Mann-Whitney *U* test *b*:Kruskal-Wallis test



[Abstract:0168] [Obsessive-compulsive disorders (OCD)]

**0168 - Impact of attention-deficit/hyperactivity disorder comorbidity on phenomenology and treatment outcomes of pediatric obsessive-compulsive disorder**

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**OBJECTIVE:** This study, with a case–control design, investigates the impact of attention-deficit/hyperactivity disorder (ADHD) comorbidity on the phenomenology and treatment outcomes in a clinical sample of pediatric obsessive-compulsive disorder (OCD).

**METHODS:** The data were derived from an evaluation of the sociodemographic and clinical characteristics of 364 children with OCD who were regularly followed up over a 4-year period. Between-group analyses of psychiatric scales were used to compare patients with ADHD comorbidity (n = 144, 39.5%) with their ADHD-free opponents. The clinical course and treatment outcomes of each patient were evaluated based on 4-year clinical follow-up data.

**RESULTS:** Substantial clinical variations in pediatric OCD caused by ADHD comorbidity were identified, including a male preponderance, higher rates of concurrent conduct problems, tic disorders, and learning disabilities, as well as prolonged symptom and treatment durations accompanied by poor response to first-line treatments and higher rates of treatment resistance. Contrary to previous findings, ADHD comorbidity had no impact on the age of OCD onset, and the severity of OCD symptoms was lower in ADHD. With ADHD comorbidity, the OCD symptom course tended to be chronically stable, which may have resulted in complaints persisting into adulthood. In ADHD-free patients, contamination, doubt, religious, somatic obsessions, and cleaning were all more common than in those with ADHD. There was a positive correlation between compulsion scores and the severity of ADHD symptoms, which may be related to increased compulsive coping in ADHD. Impulsivity or compulsivity dominance in the symptom presentation of OCD-ADHD comorbidity may determine phenomenological distinctions such as whether concurrent traits are more prone to tics, conduct problems, or internalizing problems. The primordial associations for clinical characteristics, which were independently associated with ADHD comorbidity, were adjusted using multivariate logistic regression analysis. Clinical variables such as being male, absence of cleaning compulsion, the existence of concurrent conduct problems, tic disorders, and dyslexia, as well as longer treatment duration and poorer treatment response, were all independent predictors of ADHD comorbidity. With an 80.8% accurate classification and relatively fine goodness-of-fit model, the regression model consisting of those predictors had good predictiveness for ADHD comorbidity (R<sup>2</sup> = 0.543).

**CONCLUSIONS:** The close association between pediatric OCD, ADHD, and tic disorders can be defined as a specific subtype of pediatric OCD, characterized by more conduct problems, a chronically stable course of OCD symptoms, and poorer treatment outcomes. Correlational analyses in a longitudinal design and the inclusion of an impulsivity scale would be beneficial for further research to interpret the impulsivity-related correlates in the findings on tic and conduct problems.

**Keywords:** obsessive-compulsive disorder, ADHD, phenomenology, treatment outcomes, child psychiatry

[Abstract:0169] [Obsessive-compulsive disorders (OCD)]

**0169 - A Retrospective evaluation on demographic, phenomenological, and comorbidity features of pediatric obsessive-compulsive disorder**

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**OBJECTIVE:** Obsessive-compulsive disorder (OCD) is a serious psychiatric disorder which commonly has onset in childhood. The peak OCD incidence occurs in early adolescence and early adulthood and 25-50% of adults with OCD experience onset before age 18, that the rates for symptom-onset in childhood (before 11 years of age) was 49%, while the rates for symptom-onset in adolescence (between 11-18 years) were 23% as reported in a study on adults with OCD. Furthermore, the relationship between OCD and other psychiatric disorders are highly prevalent among children, that is, almost 80% of children with OCD commonly, nearly have one or more comorbid diagnosis. The most common comorbidities of p-OCD are attention-deficit/hyperactivity disorder (ADHD), generalized anxiety disorder (GAD) and tic disorder. Although OCD has been considered as a unitary spectrum disorder, different symptom dimensions, increasingly being used to define OCD phenotypes, have been postulated by numerous studies of factor-analysis. A four-factor structure model of OCD symptoms, consisted of 'contamination/washing', 'obsessions/checking', 'ordering/symmetry' and 'hoarding', firstly described by Leckman et al. (1997) and recently supported by numerous studies. The various symptom dimensions/phenotypes of OCD may be associated with largely distinct environmental risk factors or different heritability of these OCD traits, or differences in phenomenology. It is valuable to determine the clinical characteristics of children and adolescents followed up with p-OCD to understand the nature of the disorder, along with the factors associated with life-long prognosis and treatment responses. In this study, we aimed to evaluate demographic, phenomenological and comorbidity features of a relatively larger pediatric sample, including clients with p-OCD who have been regularly followed within five years.

**METHODS:** The impacts of sex, age of onset, phenotype, and comorbidity on clinical features were explored in a large clinical sample with pediatric obsessive-compulsive disorder (p-OCD) (n = 457), along with concomitant specific features in the framework of different symptom dimensions/phenotypes, by a retrospective cross-sectional evaluation design.

**RESULTS:** The most prevalent phenotype was obsession/checking (almost half), and the clinical features belonging to different phenotypes varied among sexes, age of onset, severity, and comorbidities. The contamination and aggressive obsessions, along with the compulsions such as cleaning and repeating routine activities, were the most prevalent symptoms, which were prevalently accompanied by generalized anxiety disorder, attention deficit hyperactivity disorder, and depression. Females with OCD were likely prone to exhibit comorbid internalizing disorders, whereas males were prone to externalizing.

**CONCLUSION:** This recent study on a large Turkish clinical sample of p-OCD followed up within 5 years, highlighting separate evidence on subtyping of p-OCD in phenotype and

comorbidity frame. Our findings particularly highlight to a separate evidence on subtyping of pediatric OCD according to both phenotype and comorbidities, that, identifying specific subtypes such as those linked to concurrent internalizing, or externalizing disorders, or those with different phenotypes such as hoarding symptoms. The efforts of defining these specific subtypes of pediatric OCD provides insight to clinicians for structuring effective treatment combinations timely, serving to manage variable life-long prognosis and clinical outcomes.

**Keywords:** Obsessive-compulsive disorder, sociodemographic, symptom dimension, phenotype, child psychiatry

**Keywords:** obsessive-compulsive disorder, phenomenology, comorbidity, child psychiatry, clinical follow-up

**[Abstract:0174] [Mood disorders]**

**0174 - Predictability of depression by plasma low-grade inflammatory markers in the background of pediatric celiac disease**

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**ABSTRACT**

**OBJECTIVE:** The previous hypothesis on the predictability of either psychopathological or chronic metabolic disorders with complete blood count (CBC)-derived, low-grade peripheral inflammatory indicators should be considered with caution given the discrepancies in findings. We aimed to examine the predictability of low-grade inflammatory indices via investigating the relationship of those with depression in a background of celiac disease (CD) by a case-control study in a pediatric sample.

**METHODS:** A total of 59 children with a biopsy-proven CD were mainly compared with 40 controls in terms of depression and anxiety symptoms, as well as global functionality and CBC-derived indices which the previous studies focused on. Laboratory findings and psychiatric symptoms were examined through subgroups by either depression or gluten-free diet (GFD) compliance.

**RESULTS:** Prevalence of depression was 34% in the celiac group and there was a perpetual association of depression with CD. However, none of the CBC-derived indices investigated in earlier studies of either depression or CD was found to be differed by the presence of CD, depression, or status of GFD compliance.

**CONCLUSIONS:** Despite the presence of strong evidence for the role of inflammation on the prevalent comorbidity of depression with CD, the impact of inflammation on the depression-CD relationship was not demonstrated on these subjected markers which have been previously recommended as good indicators of systemic inflammation, however, with a low level of evidence and contradictory findings on predicting inflammation. The predictability of psychiatric and metabolic outcomes based on chronic inflammatory conditions with these CBC-derived indices requires further investigation.

**Keywords:** celiac disease, depression, neutrophil/lymphocyte ratio, PLR, MPV, inflammatory markers.

[Abstract:0175] [Eating disorders]

**0175 - Obsessive-Compulsive symptomatology and disgust-propensity in disordered eating behaviors of adolescents with celiac disease**

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**OBJECTIVE:** Considering the importance of underlying psychopathological mechanisms that mediate maladaptive eating behaviors in Celiac disease (CD) in the determination of cognitive-behavioral therapeutic approaches, we investigated the impact of obsessive-compulsive symptomatology and disgust-propensity on disordered eating attitudes (DEA) and poor gluten-restricted diet (GRD) compliance in adolescents with CD.

**METHODS:** Adolescents with biopsy-proven CD (n = 148, aged 12-18 years) were compared with age and sex-matched controls (n = 104) in terms of eating attitudes/behaviors, obsessive-compulsive symptoms, and disgust-propensity, as well as depression and anxiety in order to rule out depression and anxiety-related covariates. The clinical implications associated with poor GRD compliance were determined using between-subgroup analysis. Data were analyzed using multivariate linear regression for DEA and multiple logistic regression for GRD adherence.

**RESULTS:** In adolescents with CD, DEA was remarkably associated with obsessive-compulsive symptom severity and disgust-propensity, especially in contamination and core-disgust sub-dimensions. Obsessionality and disgust-propensity were independent predictors of DEA, of which the obsessive-compulsive symptom severity was the most decisive predictor of DEA. Higher DEA severity and lower body-mass index were independent predictors of poor GRD compliance.

**CONCLUSIONS:** Hypervigilance and catastrophic interpretations towards benign somatic sensations coupled with gluten contamination-related fears may plausibly result in food-related preoccupations, obsessionality, and disgust-propensities, further leading to DEA for coping with escalating anxiety. The reciprocal relationship between lifelong GRD and DEA, mediated by obsessionality and disgust-propensity, was supported by current findings that could guide clinicians in cognitive-behavioral therapy of maladaptive eating behaviors in adolescents with CD.

**Keywords:** Celiac disease, disordered eating attitudes, obsessive-compulsive, disgust propensity, self-esteem, child psychiatry.

**Keywords:** Celiac disease, disordered eating attitudes, obsessive-compulsive, disgust propensity, gluten-restricted diet, adolescents.

[Abstract:0176] [Attention deficit hyperactivity disorder (ADHD)]

0176 - A Clinical investigation on ADHD-traits in childhood celiac disease

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**OBJECTIVE:** Celiac disease (CD) is an autoinflammatory illness characterized by intestinal villus atrophy, which often results from gluten consumption in genetically susceptible individuals. Recent studies indicate that the autoinflammatory foundation of CD is not limited to the gut and absorption, but also includes systemic manifestations such as neurological and psychiatric complaints. Six to eleven percent of individuals with CD have exhibited comorbid neurologic difficulties, perceptual impairments, and mental issues such as attention deficit and hyperactivity disorder. The risk of neuropsychiatric disturbances was reported as 2.6%, while 26% in adults. This interaction has been linked to vitamin and mineral deficiencies through both inflammation and disease-related malabsorption. However, the pathophysiology of those neurological and neurodevelopmental psychiatric comorbidities developing in the course of CD is not clear. There are a few research examining neuropsychiatric disorders and symptoms of ADHD in individuals with CD. However, there are no definitive results about either the presence of exact comorbidity between Celiac disease (CD) and attention-deficit/hyperactivity disorders (ADHD) or etiology. We intend to screen ADHD-related cognitive and behavioral traits in children with biopsy-proven CD, as well as investigate the possible association of these traits with certain vitamin levels, body-mass index, and gluten-free diet (GFD) compliance.

**METHODS:** A total of 85 children with biopsy-proven CD (the ages of 8-18) were compared with age and sex-matched 72 healthy controls in terms of demographics, psychometric data, certain vitamin levels, and anthropometric measurements.

**RESULTS:** ADHD-like cognitive issues, such as inattention and learning difficulties, as well as psychosomatic symptoms and poor prosocial behavior, were all associated with GFD noncompliance in childhood CD.

**CONCLUSION:** Untreated CD may predispose to ADHD-resembling symptoms. Physicians should be aware of the probability of ADHD misdiagnosing due to ADHD-resembling cognitive and behavioral traits in untreated CD children. There is currently no definitive evidence of a link between ADHD and CD. ADHD-like cognitive issues, such as attention deficit and learning difficulties, as well as psychosomatic symptoms and poor prosocial behavior, were all associated with GFD noncompliance in childhood CD. The CD patients in this study did not demonstrate any difference in terms of ADHD-traits compared to controls. Therefore, it is not recommended to routinely test for CD while evaluating ADHD (or vice versa) or to use GFD as a conventional therapy for ADHD. Nonetheless, it should be noted that untreated CD may predispose to ADHD-like behavior, and clinicians should keep in mind that behavioral traits in untreated CD children are at risk for an ADHD misdiagnosis. When professionals look at someone with ADHD, they should check for a wide range of physical symptoms as well as the usual neuropsychiatric ones.

**Keywords:** ADHD, Celiac disease, CPRS-48, SDQ, inattention, learning problems, prosocial behaviors, pediatrics.

**Keywords:** ADHD, Celiac disease, CPRS-48, inattention, learning problems, prosocial behaviors

[Abstract:0186] [Attention deficit hyperactivity disorder (ADHD)]

**0186 - The Effect of child's attention deficit hyperactivity disorder symptoms on parenting styles and family functioning**

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**OBJECTIVE:** Although genetic and biological factors have been frequently examined in the symptomatology of attention deficit-hyperactivity disorder (ADHD), parenting styles and family functionality of families have been the subject of few studies. The aim of this study is to examine the effect of the diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) on the parenting styles of the parents and the general functionality of the family and the changes in the existing parameters in the presence of comorbid diagnosis.

**METHODS:** Our study was conducted with children between the ages of 7-17 who applied to Gaziantep University Hospital Child Psychiatry Department in 2022 with ADHD diagnosis and their parents, and a control group who did not have any psychopathology and parents. The Sociodemographic data form, Alabama Parenting Questionnaire, Children's Depression Scale (CDI), Screen for Child Anxiety Related Disorders (SCARED), Turgay DSM-IV Originated Disruptive Behavior Disorders Symptom Screening Scale, Family Assessment Device (FAD) general functioning subscales were completed by the participants.

**RESULTS:** Findings; Parents of children with ADHD showed higher positive parenting scores than the control group. In the combined type of ADHD subtype, inconsistent discipline scores were significantly higher than the attention deficit-dominant type. Psychiatric referral rate in families with ADHD diagnosis was significantly higher than in the control group. In addition, a strong correlation was found between familial functionality scores and ADHD severity in the ADHD attention deficit dominant subtype, and it was observed that as ADHD severity increased, family functionality decreased.

**CONCLUSIONS:** This study shows that parents of children with ADHD have different parenting styles and ADHD also affects the overall functionality of the family. For this reason, more positive results can be obtained by evaluating the current problems of children as well as their parents and parenting styles and making necessary interventions for them.

**Keywords:** ADHD, familial functionality, child, parenting styles, ADHD subtype

**Keywords:** ADHD, Parenting style, Family functioning

**[Abstract:0187] [Schizophrenia and other psychotic disorders]**

**0187 - Ambulatory pharmacotherapy of five psychiatric disorders in Bahrain: A descriptive study**

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**OBJECTIVES:** We examined the outpatient prescription pattern of psychotropic drugs used for the treatment of five major psychiatric diseases in Bahrain.

**METHODS:** This was a retrospective, cross-sectional study in which we targeted randomly selected prescriptions (n= 992, 56.1% males, 43.9% females) from 1st of January until 31st of December, 2017.

**RESULTS:** The pharmacotherapy of schizophrenia consisted of atypical anti-psychotics (92.8%), or typical anti-psychotics (17.8%). The anti-depressants used were: Selective-serotonin reuptake inhibitors (SSRIs) (41.6%), Serotonin-norepinephrine reuptake inhibitors (SNRIs) (34.5%), tricyclic anti-depressants (TCAs) (12.8%), and atypical anti-depressants (10.6%). Combination anti-depressants was employed in (12.4%) of cases. The pharmacotherapy for anxiety disorders was composed of benzodiazepines (59.5%), atypical anti-psychotics (45.2%), SSRIs (40.5%), SNRIs (28.6%), TCAs (14.3%), and anti-convulsants (16.7%) and atypical anti-psychotics (7.1). The medications prescribed for bipolar disorder were atypical anti-psychotics (78.6%), anti-convulsants (66.5%), benzodiazepines (27.7%), typical anti-psychotics (8.9%) and lithium (6.7%). Schizoaffective disorder patients received atypical anti-psychotics (97.3%), anti-convulsants (47.8%), benzodiazepines (27.4%), SNRIs (25.7%), SSRIs (15%), typical anti-psychotics (10.6%), atypical anti-depressants (10.6%) and TCAs (6.2%). A combination of antipsychotics and anti-depressants was employed in 33.6% and 4.7% of all subjects regardless of the diagnosis, respectively.

**DISCUSSION:** With a few exceptions, the pharmacotherapy of psychiatric diseases in Bahrain was in line with the latest recommendations. However, psychotropic polypharmacy was observed and calls for immediate attention.

**Keywords:** Psychotropic drugs, Psychiatric disorders, Outpatient Prescription

**[Abstract:0189] [Anxiety disorders]**

**0189 - The Turkish validity and reliability study of work and social adjustment scale - youth and parent version (WSAS-Y/ WSAS-P)**

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**OBJECTIVE:** Psychiatric diseases can negatively affect the functionality of youth in many areas. The Youth and Parent versions of Work and Social Adjustment Scale (WSAS-Youth [WSAS-Y], WSAS-P) evaluates the level of impairment and areas of impairment, which is predicted to be useful in the diagnosis, treatment and follow-up processes of many psychiatric diseases. The aim of this study is to examine the validity and reliability of the Turkish version of the WSAS-Y and WSAS-P.

**METHODS:** 298 youth aged 8-18 years with any anxiety disorder diagnosis and 107 healthy youth and their parents participated in the study. Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version was administered to all participants by the researcher. Youth participating in the study were asked to fill out the Screen for Child Anxiety Related Disorders (SCARED), The Pediatric Quality of Life Inventory (PedsQL), and the WSAS-Y form. The parents, on the other hand, filled out the sociodemographic data form prepared by the researcher, the PedsQL parent form, and the WSAS-P form. The Clinical Global Impression Scale (CGI) and Clinical Global Assessment Scale (CGAS) were completed by the researcher at the end of the interview. 100 youth randomly selected from the study group were called again 2 weeks after the first evaluation and asked to fill in the youth and parent forms of the WSAS once again in terms of test-retest reliability. For the validity analysis of the study, internal construct validity, external construct validity, factor validity and discriminant validity; In the reliability analysis, internal consistency and test-retest reliability were examined.

**RESULTS:** In our study, Rasch Analysis was used for internal construct validity in order to evaluate the validity of the Turkish version of the WSAS-Y and WSAS-P forms. According to the results of the analysis, it was seen that the values obtained were statistically sufficient, and the internal validity of the WSAS-Y and WSAS-P forms were ensured. Confirmatory factor analysis was applied for factor validity and factor loadings and covariant parameters between factors were found to be statistically significant. In the concurrent validity analyzes, when the total score and subtest scores of the WSAS-Y and WSAS-P forms and other scales are examined, there is a strong negative relationship between PedsQL and CGAS, a strong positive relationship with SCARED and CGI. ROC analysis was performed for discriminant validity, and it was seen that the performance of the WSAS-P form was excellent, while the performance of the WSAS-Y form was between good and excellent in terms of distinguishing between the patient and the healthy. The Cronbach  $\alpha$  coefficient, which was used to evaluate the internal consistency of the scale in the reliability evaluation, was found to be 0.755 for the parent form and 0.750 for the child/adolescent form. In the test-retest evaluation, the correlation coefficient in the parent scale total scores was 0.934-  $p < 0.001$ , ( $n=100$ ), and the child/adolescent scale total score correlation coefficient was 0.937- $p < 0.001$ .



**CONCLUSION:** The child/adolescent and parent form of the Work and Social Adjustment Scale is valid and reliable in Turkish.

**Keywords:** Functionality, reliability, validity, youth

[Abstract:0193] [Eating disorders]

### **0193 - Psychometric properties of Turkish Orthorexia Nervosa Inventory in a clinical adolescent sample**

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**OBJECTIVE:** Orthorexic tendencies are increasingly prevalent among children and adolescents 1. This study set out to investigate the reliability and validity of the Turkish version of the Orthorexia Nervosa Inventory (ONI) in a clinical adolescent sample.

**METHODS:** 266 adolescents aged 12-18 years, who applied to the Department of Child and Adolescents Psychiatry at Karadeniz Technical University Hospital were included in the study. Participants completed sociodemographic data form, Orthorexia Nervosa Inventory (ONI), Eating Attitude Test, Revised Child Anxiety and Depression Scale-Child Version and ORTO-15 scales. Ethical approval was granted by the hosting agency's ethics committee.

**RESULTS:** The Cronbach's alpha coefficient for the ONI reached 0.92, indicating very good internal consistency. Total factor scores and Cronbach alpha values for behaviors, impairments, and emotions were found to be 0.84, 0.84, and 0.83, respectively. The CFA performed supported the three-factor structure of the ONI obtained in the first sample. The minimum discrepancy per degree of freedom = 1.89 and the model generally fit well to the structure (RMSEA = 0.058, SRMR = 0.033, CFI = 0.92, TLI = 0.91). There was a statistically significant difference between the subscales of ONI which are emotions and impairments in terms of gender ( $p = 0.001$  and  $p = 0.035$ ) but there was no statistically significant difference between the total ONI scores according to gender ( $p = 0.093$ ).

**CONCLUSION:** This study has shown that the Turkish version of the ONI is a valid and reliable scale for specifying the tendency for Orthorexia Nervosa in a Turkish adolescent population. ONI is the first orthorexia scale that includes items assessing physical impairments that represents an important component of the disorder 2. These findings contribute in several ways to our understanding of orthorexic tendencies and provide a basis for more concrete research data that can be obtained by using the ONI, which is a reliable scale in studies to be conducted among adolescents.

**Keywords:** Child and adolescent mental health, Eating disorder, Orthorexia nervosa, Validation

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[Abstract:0198] [Neuroscience: Neuroimaging-Genetic Biomarkers]

**0198 - The Relationship between rumination, perceived stress and affective neuroscience personality scale**

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**AIM:** In this study, it was aimed to understand how stress affects rumination in university students and to investigate whether rumination differs between individuals with positive and negative affective systems.

**METHOD:** Between 15 March and 20 June 2022, 512 students studying at Başkent University were reached and asked to fill in the face-to-face sociodemographic data form, the Perceived Stress Scale (PSS) questionnaires to determine the stress level, Ruminative Responses Scale brief form (RRS-BF) to evaluate the ruminative thinking style and the Affective Neuroscience Personality Scale (ANPS) evaluate their personality traits.

**RESULTS:** When the data of 503 people were analyzed in the study, 57.5% (n=289) of the participants were female and 42.5% male (n=214) in terms of gender distribution. The mean age of the individuals was 20.8±1.9. In the correlation analysis, the perceptions of brooding and reflection, which are ruminative thinking styles, were found to be significantly associated with stress ( $r=.268, p<.001$ ;  $r=.300, p<.001$ ). At the same time, negative subscales of the affective neuroscience personality scale, such as FEAR, ANGRY, and SADNESS, were found to be associated with both brooding and reflection.

**CONCLUSION:** The findings show that perceived stress can affect rumination. In addition, FEAR, ANGRY and SADNESS, which are negative affective systems, also affect ruminative thoughts. These findings may provide constructive suggestions for reducing ruminative thoughts and supporting positive affective systems in university students.

**Keywords:** Rumination, affective systems, stress

[Abstract:0201] [Autism Spectrum Disorders]

**Toward the detection of reduced emotion expression: A multicenter broad autism phenotype study**

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**OBJECTIVE:** Although more than 23 years have passed since the first investigation into the BAP, the lack of standardized criteria for BAP complicates attempts to engage in comparative studies of relevant research, although it also inspires researchers to find new methods for exploring this area. Different approaches have been proposed to characterize and detect BAP; however, just as BAP has been defined in various ways, so have a wide range of structured interviews, observational tools, and scales have been used in its assessment<sup>1-4</sup>. Assessment of ASD is far more specific than that of BAP. For instance, while facial analysis, emotion recognition, and mimicry analysis are prominent in the definition of ASD and help to separate its features from the general population, these approaches have barely been applied to research into BAP. The central aim of this paper is to propose a novel methodology for investigating deficits in facial emotional expression in the non-ASD siblings of children with ASD using an open-source software and a validated stimulus task. A secondary aim is to confirm facial expression deficiency in children with ASD as compared with typically developed children and to assess whether this deficit is related to ASD symptom severity.

## **METHODS**

### **Setting and Study Design**

This prospective, non-interventional, multicenter study was conducted at four centers in Turkey and was approved by the local medical ethics board. Written informed consent was obtained from parents and from children over the age of 12 before the procedure commenced.

### **Participants**

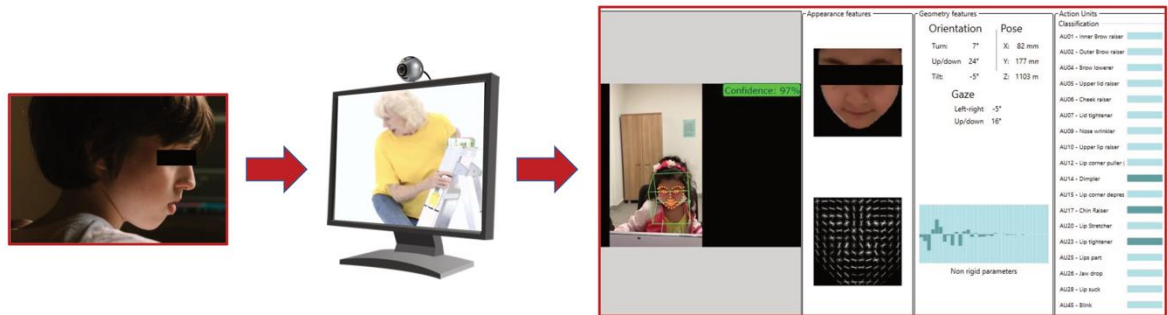
A sample of 60 children with high functioning ASD, 60 non-ASD siblings of children with ASD, and 60 typically developed (TD) children were included in the study. Data from these children were collected between December 2019 and December 2021.

All the children were between 8 and 17 years of age. Exclusion criteria for the groups were a measured IQ score on the Wechsler Intelligence Scale for Children–Revised of < 70 (during recruitment or from a recent IQ evaluation), epilepsy, neurological disorders, or any known genetic disorders such as Down’s or Fragile X syndrome, and comorbid psychiatric disorders. The diagnosis of children in the autism group was made by two child and adolescent psychiatrists with the DSM-5-based clinical examination. Similarly, the diagnosis of ASD was excluded by the DSM-5-based clinical examination of the sibling group. The children already clinically diagnosed with ASD, siblings, and the TD children were all screened for the presence of comorbid disorders using both a DSM-5 based clinical examination and the Schedule for Affective Disorders and Schizophrenia for School-Age Children–Present and Lifetime Version, DSM-5, Turkish Adaptation (K-SADS-PL-DSM-5-T). IQ data were not available for the sibling and TD groups, but all participants were functioning in age-appropriate settings (social, academic, etc.) and were within the normal functioning range. Children in the sibling group are not siblings of the children in the ASD group. Because, although the sibling meets the eligibility criteria, their siblings with ASD may not or vice versa.

### **Procedure**

Participants were told that they would now look at some short scenes to which they should direct their attention entirely. They were told to look directly at the 17” monitor screen, which was approximately 60 centimeters away from the child. Compliance with these instructions was confirmed with video recordings. After each scene, a 10-second break was given before the next scene was presented. The doctor did not tell the children that the webcam was recording them. During the procedure, the participants’ faces were recorded with a webcam capable of

shooting video at 1920×1080p resolution and at 30fps (frames per second). Figure 1 shows the operation scheme for the study.



**Figure 1.** Operation scheme for the study

### 1.1. Automatic analysis and feature extraction of facial expressions

The facial action coding system (FACS) is widely used as a coding approach for assessments in automatic facial expression analysis and generally in behavioral discipline. FACS analysis facial expressions into 44 observable muscle movements, called action units (AUs). With this aspect, via the face recognition software libraries, a face recognition problem (by observing a still and/or a moving image) is modelled as a multi-class and multi-label classification problem for which the relevant AU (or AUs) is (are) detected at the corresponding image frame. Throughout this study, we used a free and open-source Python and Torch (not to be confused with PyTorch) implemented platform for face recognition with deep neural networks (via utilization of algorithms such as Convolutional Neural Networks supported by other methods such as  $L_2$  normalization) (OpenFace 2.0)<sup>5</sup> in order to obtain facial AUs from the records of the participants' faces. It is Owing to the fast-scripting language LuaJIT (Lua Just In Time), Torch framework enables the use of a variety of machine learning algorithms on the Graphical Processing Units (GPUs) in addition to the Central Processing Units (CPUs) of the computers. This yields the programme to outperform against other similar face recognition platforms in terms of accuracy and the number of evaluations/operations; as demonstrated via the Labeled Faces in the Wild (LFW) database, which is a widely used academic test set for face verification<sup>6</sup>. Thanks to this powerful infrastructure, though not being an official gold standard, the system is a very accurate and rapid face recognition tool, and hence a very feasible tool for the purpose of our study.

Throughout the AU extraction process (from the videos); the following methodology was followed:

- Each video consists of consecutive frames with relatively small movements of the relevant children (mostly his/her facial expressions/mimics) accompanied by still/static background and landmarks.
- OpenFace 2.0 calculates the intensity (on a scale from 0 to 5) of 18 AUs from each video frame.
- Since there is no abrupt change in the consecutive video frames (thanks to the limited movement of the child and the still/static background) for a specific episode, the intensity values of AUs extracted by OpenFace for consecutive frames were averaged throughout the duration of the relevant episode. This is a very common approach referred to as “time-average filtering” which falls in the class of temporal filtering, and is a fundamental technique applied in almost all video compression algorithms; and hence academically and scientifically unarguably accepted. The AUs chosen were based on the emotion FACS (EmFACS) mapping of emotion to AUs.

- The extracted AUs typically were associated with the expression of a specific emotion (Table1).

*FACS: Facial acting coding system, AU: Action Unit*

#### Emotion Stimulus Task

The EU-Emotion Stimulus Set was created as part of the Autism Spectrum Condition (ASC)-Inclusion project within the European Community's Seventh Framework Programme (FP7/2007-2013; [www.ascinclusion.eu](http://www.ascinclusion.eu); <sup>7</sup>. The purpose of the ASC-Inclusion project was to produce an online socio-emotional training instrument for children with a diagnosis of ASC.

Stimulus Task	Emotion	Action Unit	FACS Name
<b>Scene 1:</b> An elderly woman is surprised to see an old photograph falling from in a book.	Surprise	AU5 + AU26	Upper lid raiser + Jaw Drop
<b>Scene 2:</b> A boy sits sadly at the table. A girl older than him comes up and pats him on the back.	Sadness	AU1 + AU15	Inner brow raiser + Lip corner depressor
<b>Scene 3:</b> An old woman is afraid to climb the stairs with a box in her hand, and she waits for a while in the middle of the stairs, fearfully.	Fear	AU4 + AU5	Brow lowerer + Upper lid raiser
<b>Scene 4:</b> A boy is lining up chess pieces alone. An older man comes to him holding out a chocolate, the boy smiles, they start playing chess together, the boy smiles and looks happy.	Happiness	AU6 + AU12	Lip corner puller + Cheek raiser
<b>Scene 5:</b> While a woman is drinking something from a glass, another person, who is busy looking at their own phone, comes past and hits her on the shoulder, the woman gets angry.	Anger	AU4 + AU23	Brow lowerer + Lip tightener with risorius
<b>Scene 6:</b> A person opens and smells the milk to prepare herself a coffee, then she is disgusted by the smell.	Disgust	AU9 + AU10	Nose wrinkler, Upper lip raiser

The EU-Emotion Stimulus Set is a validated compilation of 418 dynamic multimodal emotion and mental state portrayals exhibited through body gestures, facial expressions, and contextual social scenes. We used the contextual social scenes in this study. For these scenes, one to three actors are requested to perform a social scenario. Each contextual social scene depicts one emotion. In the current study, a 3 minutes 50 seconds contextual social scene, consisting of the six best validated scenes (without any verbal language), were watched. These included six core emotions (surprise, sadness, fear, happiness, anger, and disgust) with 10 second pauses between them (Table 1). The validation (recognition task and emotional impression) study for this evidence-based set has been published <sup>7</sup>. Official permission was obtained from the developers for its use.

#### Statistical Analysis

The action unit values for the study groups (ASD, Sibling, and TD) were compared using the Kruskal-Wallis test because nonparametric assumptions were met. A post hoc comparison was carried out using the Dunn-Bonferroni test. Epsilon squared was used as effect size measure.

**Table 1.** Task content, associated emotion, and action unit encodings

First, spontaneous emotion expression intensity was investigated across the groups: the participants' responses were examined to see whether they expressed relevant AUs in response to the social context videos involving surprise (AU5 and AU26), sadness (AU1 and AU15), fear (AU4 and AU5), happiness (AU6 and AU12), anger (AU4 and AU23), and disgust (AU9 and AU10). P values lower than 0.05 were regarded as statistically significant. The relationships between the CARS scores and the Autism Groups's AU values were assessed by the Spearman Test. The Statistical Package for Social Sciences (SPSS) version 24.0 was used for the data analysis. Boxplots representing post-hoc comparison (Figure 2) were formed using GraphPad Prism version 9 (San Diego, USA).

**RESULTS:** Table 2 presents the statistics for the sociodemographic data of the 180 participants. The three groups did not differ significantly in terms of age or sex distribution.

**Table 2.** Participants' characteristics

	<b>ASD Group</b> ( <i>n</i> = 60)	<b>Sibling Group</b> ( <i>n</i> = 60)	<b>TD Group</b> ( <i>n</i> = 60)	<i>p</i>
<b>Age</b> (months), ( <i>mean</i> ± <i>SD</i> )	126 ± 25.7	126 ± 32.1	126 ± 17.1	0.378 <sup>b</sup>
<b>Gender</b> ( <i>n</i> , %)				
Female	30 (50.0)	30 (50.0)	30 (50.0)	0.999 <sup>a</sup>
Male	30 (50.0)	30 (50.0)	30 (50.0)	
<b>Consanguineous marriage</b> ( <i>n</i> , %)	6 (10.0)	5 (8.3)	5 (8.3)	0.934 <sup>a</sup>
<b>Age at diagnosis</b> (months), ( <i>mean</i> ± <i>SD</i> )	35.45 ± 59.7			
<b>IQ Scores</b> ( <i>mean</i> ± <i>SD</i> )	81.56 ± 7.63			

*a:* Chi-squared test, *b:* Kruskal Wallis test

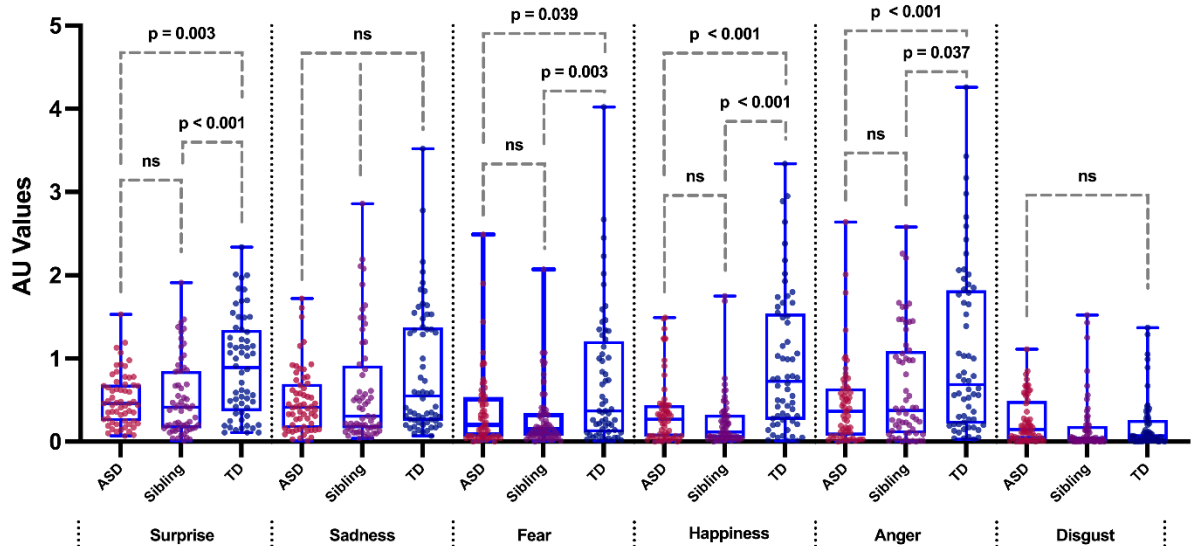
Table 3 presents a comparison, between groups, of the evidence for each emotion from the specific AUs identified. There were statistically significant differences in the spontaneous emotion expression intensity of the ASD, sibling, and TD groups in the relevant AUs for social context videos involving surprise ( $p < 0.001$ , effect size = 0.09), sadness ( $p = 0.048$ , effect size = 0.03), fear ( $p = 0.003$ , effect size = 0.06), happiness ( $p < 0.001$ , effect size = 0.19), anger ( $p < 0.001$ , effect size = 0.07), and disgust ( $p = 0.02$ , effect size = 0.04) (Table 3).

**Table 3.** Group comparison of prespecified action units for each emotion

	ASD Group (n=60)		Sibling Group (n=60)		Typically Developed Group (n=60)		Kruskal- Wallis p value	Effect Size
	Mean ± SD	Median (25-75 percentile)	Mean ± SD	Median (25-75 percentile)	Mean ± SD	Median (25-75 percentile)		
<b>AU5+AU26 (Surprise)</b>	0.509 ± 0.315	0.456 (0.252- 0.688)	0.533 ± 0.456	0.419 (0.169- 0.848)	0.905 ± 0.601	0.887 (0.382- 1.336)	<0.001	0.093
<b>AU1+AU15 (Sadness)</b>	0.492 ± 0.388	0.411 (0.172- 0.688)	0.620 ± 0.663	0.303 (0.162- 0.900)	0.839 ± 0.756	0.551 (0.254- 1.365)	0.048	0.034
<b>AU4+AU5 (Fear)</b>	0.376 ± 0.398	0.200 (0.059- 0.539)	0.292 ± 0.372	0.150 (0.068- 0.346)	0.725 ± 0.808	0.367 (0.119- 1.183)	0.003	0.067
<b>AU6+AU12 (Happiness)</b>	0.356 ± 0.398	0.274 (0.065- 0.440)	0.246 ± 0.336	0.115 (0.045- 0.323)	0.940 ± 0.838	0.723 (0.273- 1.532)	<0.001	0.197
<b>AU4+AU23 (Anger)</b>	0.462 ± 0.510	0.366 (0.079- 0.641)	0.659 ± 0.668	0.374 (0.106- 1.081)	1.065 ± 1.004	0.686 (0.220- 1.808)	<0.001	0.079
<b>AU9+AU10 (Disgust)</b>	0.254 ± 0.276	0.147 (0.037- 0.481)	0.180 ± 0.334	0.040 (0.010- 0.173)	0.198 ± 0.317	0.068 (0.013- 0.245)	0.024	0.042

ASD: Autism Spectrum Disorder, AU: action unit, Effect size (epsilon squared): small, medium, and large effect sizes correspond to 0.01, 0.06 and 0.14

Although there was a significant difference between the groups for all scenes, there were no significant differences in the post hoc analyses for Scene 2 (sadness) and Scene 6 (disgust); however, the effect sizes for these scenes were small. When the comparisons with medium and large effect sizes were examined, there was no difference between the ASD and Sibling, but the TD expressed more intense spontaneous emotion expression compared to the other groups, and this difference was statistically significant. Post hoc analyses are shown in Figure 2.



**Figure 2.** Group comparisons of post-hoc analysis of prespecified action units for each emotion

Table 4 shows the correlation analysis between the childhood autism rating scale (CARS) and the AU values for the ASD group. Although autism severity and emotion expression were not found to be related in the correlation analyses, a weak correlation was observed between the CARS score and anger ( $r = -0.279$ ,  $p = 0.031$ ).

**Table 4.** Correlation between prespecified action units for each emotion and CARS in the ASD group

	CARS Score	
	p value	r
<b>AU5+AU26 (Surprise)</b>	0.886	0.019
<b>AU1+AU15 (Sadness)</b>	0.530	-0.083
<b>AU4+AU5 (Fear)</b>	0.240	0.154
<b>AU6+AU12 (Happiness)</b>	0.983	-0.003
<b>AU4+AU23 (Anger)</b>	0.031	-0.279
<b>AU9+AU10 (Disgust)</b>	0.489	-0.091

*r*: Spearman's rho, weak, moderate, and strong correspond to 0.39, 0.69 and 0.89, AU: action unit, CARS: Childhood Autism Rating Scale

**DISCUSSION:** This project was undertaken to design a methodology combining a computer-vision-based program involving emotion recognition with evidence-based social context videos and to evaluate the BAP by investigating spontaneous emotion expression. The results of the study suggest that the computer-based automated analysis with a validated task of facial expressions holds potential for measuring ability to express emotions through spontaneous emotion expression and that it supports the traditional clinical assessment of phenotypical social



behavioral deficits. To the best of our knowledge, our methodology offers the first fully standardized and computer-based measure of non-verbal social behavioral deficits in sibling groups. For some years now, studies assessing the broad autism phenotype have focused on emotion recognition; however, it is only recently that spontaneous emotion expression studies, which offer a more sophisticated understanding of the precise nature and limits of emotional expression, have been investigated<sup>8</sup>.

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### [Abstract:0209] [Attention deficit hyperactivity disorder (ADHD)]

#### **0209 - Examining children with sluggish cognitive tempo accompanying attention deficit hyperactivity disorder in terms of emotion regulation difficulties**

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**OBJECTIVE:** Children with Attention Deficit Hyperactivity Disorder (ADHD) or Sluggish Cognitive Tempo (SCT) may experience impaired social functioning and problems in emotion regulation, which may be a mediator of impaired social functioning. In our study, it was aimed to examine the SCT accompanying the diagnosis of ADHD in terms of emotion recognition/understanding, emotional reactivity/negativity/lability, emotion-regulation, empathy/callous-unemotional traits characteristics that play a role in emotion regulation, and to guide treatment planning in the future.

**METHODS:** Our study included 30 children with a diagnosis of ADHD and 20 children with a SCT accompanying the diagnosis of ADHD. Between the ages of 8-12 and who met the inclusion and exclusion criteria, and admitted to Tekirdağ Namık Kemal University Hospital's Child and Adolescent Psychiatry Department. Study has been designed as two different groups.

Forms and scales used in this study consisted of Barkley Child Attention Scale, Emotion Regulation Q-Scale, Turkish version of Empathy for Children and Adolescents Scale, Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version, DSM-5 (Turkish adaptation), Clinical Global Impression Scale, Test of Perception of Affect Via Nonverbal Cue-mimics section, Turgay DSM-IV Based Destructive Behavior Disorders Child and Adolescent Screening and Rating Scale.

**RESULTS:** It was found that the group in which ADHD was accompanied by SCT differed from the group with only ADHD in terms of emotion regulation subscale scores of emotion regulation scale and empathy scale scores. When ADHD attention deficit dominant appearance was controlled in groups, emotion regulation and empathy components still differed significantly in the group which accompanied by SCT.

**CONCLUSION:** Studies with larger samples are now needed to investigate the association between SCT and emotion regulation components, especially those with potential moderator and mediator effects

**Keywords:** Attention Deficit Hyperactivity Disorder, Sluggish Cognitive Tempo, Children, Emotion Regulation, Empathy

**Keywords:** Attention Deficit Hyperactivity Disorder, Sluggish Cognitive Tempo, Emotion Regulation

**An Evaluation of Emotion Regulation Scores by Groups (results controlled against the predominantly inattentive ADHD subtype variable)**

Emotion Regulation		ADHD (n=30)	ADHD+SCT (n=20)	p
A) Emotion recognition/perception score	Mean±SD	18.93±1.96	18.45±1.73	‡0.442
	‡Mean±SE (corrected)	19.40±0.50	18.97±0.63	
B) Empathy score	Mean±SD	14.73±2.36	13.10±2.69	‡0.011*
	‡Mean±SE (corrected)	14.92±0.65	12.98±0.81	
C) Emotion regulation total score	Mean±SD	48.30±8.25	52.40±8.26	‡0.042**
	‡Mean±SE (corrected)	46.22±2.09	51.11±2.60	
C.1) Emotion regulation subscale score	Mean±SD	18.03±3.61	21.50±3.91	‡0.005**
	‡Mean±SE (corrected)	17.74±1.02	21.12±1.27	
C.2) Variability-negativity subscale score	Mean±SD	30.27±6.87	30.90±6.35	‡0.409
	‡Mean±SE (corrected)	28.48±1.62	29.99±2.02	

‡Generalized linear model (GLM), Results controlled against the predominantly inattentive ADHD subtype variable. SE=Standard error \*p<0.05 \*\*p<0.01.

**[Abstract:0210] [Disruptive behavior disorders]**

**0210 - Evaluation of post-traumatic stress disorder symptoms and hope levels of Syrian refugee adolescents living in Turkey**

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**OBJECTIVE:** Stressful experiences that many refugee adolescents are subjected to during forced migration; cruelty, flight and resettlement, or changes in their families, residential areas and societies make them vulnerable to various psychosocial problems. High levels of exposure to conflict-associated trauma worsen adolescents' mental health, including posttraumatic stress disorder (PTSD). Recent studies with refugee adolescents have emphasized the role of hope in helping them to cope with traumatic experiences. Therefore, the aim of this study is to examine the symptoms of post-traumatic stress disorder and hope levels of Syrian adolescents living in Turkey. In this context, we hypothesized that there is a negative relationship between hope levels and symptoms of post-traumatic stress disorder.

**METHODS:** 344 Syrian adolescents (boys, 65.4%) aged between 14 and 18 years old participated in the study. The Children's Revised Events Impact Scale-8 (CRIES-8) and the Children's Hope Scale were used, respectively, to determine PTSD symptoms and hope levels of Syrian adolescent refugees.

**RESULTS:** The results showed that 64.2% of refugee adolescents had high levels of PTSD symptoms according to CRIES-8 (cut-off score was calculated as 17 and above). The results also indicated that refugee adolescents with high hope levels reported fewer PTSD symptoms, while refugee adolescents' age was positively correlated to the severity of PTSD symptoms. In addition, when PTSD symptoms and hope levels were compared according to gender in refugee adolescents, it was found that PTSD symptoms in boys were significantly higher than in girls, but there was no difference in hope levels.

**CONCLUSION:** These results suggest that PTSD symptoms are still quite high in Syrian refugee adolescents and this may be affected by variables such as hope, gender, and age. Future prospective studies are needed to support these findings.

**Keywords:** Trauma, Refugees, Adolescents, Hope, Stress Disorders, Post-Traumatic

**Keywords:** Trauma, Refugees, Adolescents, Hope

[Abstract:0223] [Addiction Psychiatry]

**0223 - The Relationship of digital game addiction with ADHD symptoms and quality of life in middle school and high school years**

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**OBJECTIVE:** More than 90% of adolescents have internet access (Amanda Lenhart et al., 2015; Norris, 2007). Internet access has positive contributions to adolescent mental health and relationships, such as providing social support, increasing communication with family and peers, and sharing information (Bessièrè et al., 2010). However, over use can be a form of addiction (Ho et al. 2014). Digital game addiction (DGA) is the excessive and compulsive use of computer or video games for a long time, even if it causes academic, social and/or emotional problems (Kuss, 2013, Irmak & Erdoğan, 2016). It has been shown that internet and digital game addiction is associated with important psychiatric comorbidities such as ADHD, mood disorders and anxiety disorders (Yen et al. 2007). In this study, we examined the relationship between digital game addiction and ADHD scores and quality of life in middle school and high school youth.

**METHODS:** In this cross-sectional study, Digital game addiction scale (DGAS-7) (Lemmens et al. 2009), Turgay ADHD scale and The Pediatric Quality of Life Inventory (PedsQL) were used..

**RESULTS:** Seventy middle school and 41 high school students were included in the study, 67% of the participants were girls (n=74) and 33% were boys (n=37). There was a moderate and positive correlation between DGAS and ADHD score ( $r = 0.327$ ,  $p < .001$ ). There was a statistically significant, negative and low correlation between digital game addiction and psychosocial quality of life ( $r = -0.231$ ,  $p = 0.015$ ).

**DISCUSSION:** Although digital gaming addiction is not yet widely accepted as a disorder, it is classified under the conditions for further study of Section III, and it is suggested that more evidence is necessary before it is included as a standard disorder in the DSM system (APA, 2013). The presence of problems accompanying digital game addiction, the increase in psychiatry referrals, the seek of support and solutions by families are factors that increase the importance of examining the subject. The findings of this study indicate that DGA is associated with ADHD symptoms and low psychosocial quality of life. In the results of this study, only associations were demonstrated, no causal relationships could be concluded.

**Keywords:** Digital game addiction, ADHD, Quality of Life, Adolescent

[Abstract:0227] [Schizophrenia and other psychotic disorders]

**0227 - Thalamic volume changes in early-course schizophrenia patients receiving cognitive enhancement therapy**

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**BACKGROUND and OBJECTIVE:** Reduced bilateral thalamic volumes have been reported in patients with first-episode psychosis. Also, smaller centromedian, pulvinar, mediodorsal nuclei volumes have been identified in schizophrenia. We aimed to evaluate thalamic volume in early-course schizophrenia (ECSZ), and compare two ECSZ patient groups, one receiving cognitive enhancement therapy (CET) and other enriched supportive therapy (EST), with each other regarding their thalamic volume changes at follow up. We also evaluated the associations between thalamic volumes and cognition.

**METHODS:** ECSZ patients (n=97) and healthy controls (HC) (n=26) received T1-weighted magnetic resonance imaging and the Measurement and Treatment Research to Improve Cognition in Schizophrenia (MATRICS) Consensus Cognitive Battery (MCCB) tests. ECSZ patients were evaluated at nine-month and eighteen-month follow up after being randomly assigned a treatment (CET or EST) at baseline. Thalamic volumes and total intracranial volumes were estimated using Freesurfer 6. Annualized rate of change (ARCH) was used to quantify changes between timepoints.

**RESULTS:** The left and right whole thalamus was significantly smaller in ECSZ compared to HC at baseline ( $d=0.632, p=0.005$ ;  $d=0.705, p=0.004$ ). These findings were driven by the left pulvinar, mediodorsal; and right centromedian, pulvinar, mediodorsal nuclei. Longitudinally, no difference was found in thalamic volumes between CET and EST group at any timepoint. At baseline, there was no correlation between thalamic volumes and MCCB tests. In the whole ECSZ sample, a positive rate of change (i.e. volume increase) in the centromedian nuclei of right thalamus was positively associated with improvement in attention-vigilance domain at nine-month compared to baseline ( $r=0.739, p=0.002$ ).

**CONCLUSIONS:** We showed that the ECSZ group had lower overall and specific nuclei volumes for left and right thalamus compared to HC consistent with the literature. Thalamus plays an active role in cognitive processes. Over time, progressive recovery in the centromedian nuclei of right thalamus was found associated with improvement in attention-vigilance domain.

**Keywords:** Cognition, Cognitive Enhancement Therapy, Early-Course Schizophrenia, Thalamus, Thalamic Nuclei

[Abstract:0231] [Disruptive behavior disorders]

**0231 - Retrospective evaluation of burnout, depression, anxiety, stress and psychological flexibility of caregivers for intellectual or mentally disabled care services in the Covid-19 pandemic after psychoeducation**

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**OBJECTIVE:** The Covid-19 outbreak has caused an increase in workload, anxiety, and stress levels in healthcare workers [1]. In this process, which brings with it the increase in the risk of burnout, professional care personnel work in 7-10-15 day shifts as of March 2020 in the intellectual and mentally disabled care centers has led to difficulties. Psychoeducation-intervention session is planned to prevent and reduce the burnout of professional care personnels. The aim of this research is to determine the change in the depression, anxiety, stress, psychological flexibility, and burnout levels of the personnel in the intellectual and mentally disabled care center after the Acceptance and Commitment Therapy (ACT)- based psychoeducation.

**METHODS:** An ACT-based one-and-a-half hour psychoeducation-intervention session was held online in 14 groups for the staff of 4 disabled care centers in Aksaray. Depression-Anxiety-Stress Scale-21(DAS-21), Maslach Burnout Inventory (MBI), and Acceptance and Action Questionnaire-II (AAQ-II) scale scores of 138 (84 female, 54 male) participants were compared pre- and post-intervention, and at 1-month follow-up. Ethics committee approval dated 14.09.2021 and protocol number 21-SBKAEK was obtained from Aksaray University Clinical Research Ethics Committee.

**RESULTS:** There was no change in depression, anxiety, and stress levels. There was a significant change in the direction of worsening in the personal gratification subscale of burnout, and no difference was found in the emotional exhaustion and depersonalization subscales. KEF-II scores decreased significantly between pre- and post-intervention, that is psychological flexibility increased. This significant change in psychological flexibility continued in the follow-up.

**DISCUSSION:** Online ACT-based brief interventions are effective in increasing psychological flexibility in professional care personnel of intellectual and mentally disabled person. There is a need to evaluate its effectiveness on burnout and lack of change in depression, anxiety, and stress levels.

**Keywords:** Burnout, disabled person, healthcare workers, psychological flexibility

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[Abstract:0241] [Psychopharmacology]

**0241 - Psychedelics and neuroplasticity: a systematic review unraveling the biological underpinnings of psychedelics**

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**INTRODUCTION:** Clinical studies suggest the therapeutic potential of psychedelics, including ayahuasca, DMT, psilocybin, and LSD, in stress-related disorders. These substances induce cognitive, antidepressant, anxiolytic, and antiaddictive effects suggested to arise from biological changes similar to conventional antidepressants or the rapid-acting substance ketamine. The proposed route is by inducing brain neuroplasticity.

**METHOD:** This review attempts to summarize the evidence that psychedelics induce neuroplasticity by focusing on psychedelics' cellular and molecular neuroplasticity effects after single and repeated administration. When behavioral parameters are encountered in the selected studies, the biological pathways will be linked to the behavioral effects. Additionally, knowledge gaps in the underlying biology of clinical outcomes of psychedelics are highlighted.

**RESULTS:** The literature searched yielded 344 results. Title and abstract screening reduced the sample to 35; eight were included from other sources, and full-text screening resulted in the final selection of 16 preclinical and four clinical studies.

**DISCUSSION:** Studies (n = 20) show that a single administration of a psychedelic produces rapid changes in plasticity mechanisms on a molecular, neuronal, synaptic, and dendritic level. The expression of plasticity-related genes and proteins, including Brain-Derived Neurotrophic Factor (BDNF), is changed after a single administration of psychedelics, resulting in changed neuroplasticity. The latter included more dendritic complexity, which outlasted the acute effects of the psychedelic. Repeated administration of a psychedelic directly stimulated neurogenesis and increased BDNF mRNA levels up to a month after treatment. Findings from the current review demonstrate that psychedelics induce molecular and cellular adaptations related to neuroplasticity and suggest those run parallel to the clinical effects of psychedelics, potentially underlying them.

**CONCLUSION:** Future (pre)clinical research might focus on deciphering the specific cellular mechanism activated by different psychedelics and related to long-term clinical and biological effects to increase our understanding of the therapeutic potential of these compounds.

**Keywords:** psychedelics, structural neuroplasticity, functional neuroplasticity, molecular neuroplasticity, cellular neuroplasticity

[Abstract:0248] [Personality disorders]

**0248 - Investigation of the relationship between intolerance of uncertainty and personality traits in a community sample**

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**OBJECTIVE:** Intolerance of uncertainty can be defined as the tendency of people to react negatively emotionally, cognitively and behaviorally in the face of uncertain situations and events. Uncertainty is a concept that exists in all areas of life. Various results have been found in the literature on the relationship of uncertainty with anxiety and worry; In addition, studies with obsessive compulsive disorder and anxiety disorders have provided data on the possibility that intolerance to uncertainty may be a transdiagnostic factor.

This transdiagnostic concept, which has cognitive, emotional and behavioral components, is associated with various personality dimensions, primarily neuroticism; It was found that neuroticism was highly correlated with intolerance to uncertainty and negatively correlated with extraversion.

Our aim is to shed light on the relationship between intolerance of uncertainty and personality in a healthy sample under the guidance of current literature.

**METHODS:** 90 individuals between the ages of 18-65, who did not have a history of psychiatric diagnosis and treatment in the past, who did not have any psychiatric complaints or drug use, and who agreed to participate in our study were included in our study. Participants were informed about the study and informed consent was obtained. The study was approved by the Diskapi Yildirim Beyazit Training and Research Hospital Ethics Committee (Date: 04.07.2022- Number: 141/19). In addition to the sociodemographic data form, Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), 10-Item Personality Inventory (10-IPI) and Intolerance of Uncertainty Scale-12 (IUS-12) were administered to the participants.

**RESULTS:** 58.9% (n=53) of the participants were female and the mean age was 37.17 (SD=8.94). Considering the psychopathology data, the mean BAI and BDI scores were found to be 9.97 (SD=9.60) and 9.93 (SD=8.16), respectively. BDI did not establish a significant relationship with the subscales of 10-IPI and IUS-12, while BDI showed a strong and significant correlation with the sub-dimensions of IUS-12 (prospective anxiety  $r=.491$  and inhibitory anxiety  $r=.506$ ) ( $p<0.01$ ). Prospective anxiety and inhibitory anxiety, which are the subscales of IUS-12, were found to have positive and significant relationships with emotional stability, responsibility, and agreeableness, which are the 10-IPI subscales ( $p<0.05$ ).

**DISCUSSION:** The results of our study reveal important results regarding the relationships between anxiety, depression symptoms, intolerance of uncertainty and personality traits in a healthy sample. There are few studies in the literature on the relationship between 10-IPI, which is based on the five-factor personality theory, and intolerance to uncertainty in the literature. Our study does not show a causality due to its design, but it is recommended that our results be replicated in larger and different samples in the future.

**Keywords:** anxiety, depression, personality, uncertainty



[Abstract:0250] [Psychosomatic medicine-Liaison psychiatry]

**Investigation of metacognitions and anxiety symptoms of coronary artery disease patients: a preliminary study**

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**INTRODUCTION:** Metacognition is about understanding thought processes and the patterns behind them. It is known that these processes are closely related to emotions. It is also assumed that feelings and thoughts may be related to the manifestations of physical diseases. Focusing on anxiety and metacognition of coronary artery disease patients, this study aims to compare metacognitions and anxiety symptoms between coronary artery disease patients and healthy control group.

**MATERIAL-METHODS:** The sample of this preliminary study, which was designed as a case-control study, consisted of 43 coronary artery disease patients admitted to the cardiology outpatient clinic and 74 healthy controls. Sociodemographic data form, Metacognition Questionnaire-30 scale (MCQ-30), and Beck Anxiety Inventory (BAI) were applied. The obtained data were duly calculated and subjected to statistical processing. The study was approved by Kırıkkale Faculty of Medicine, non-interventional studies ethics committee (15.04.2021/2021.03.20).

**RESULTS:** The mean age of the participants included in the study was 60.52±6.30 years, and 73.5% (n=86) were female. There was no statistical difference between the two study groups in the comparison of sociodemographic data (p>0.05). Between Coronary Arter Disease and healthy control group, BAI (t=-2.884, p=0.005), MCQ-30 Lack of Cognitive Confidence (t=-2.290, p=0.024), Negative Beliefs about Uncontrollability and Danger (t=-4.618, p<0.001) and need to control thoughts (t=-2.595, p=0.011) scores.

**CONCLUSION:** This study revealed that metacognitions and anxiety were higher in patients with coronary artery disease. These results are important in terms of revealing the relationship between metacognitions and physical problems. In addition, we predict that these results may shed light on psychiatric therapeutic methods to be applied to coronary artery patients. However, the results need to be replicated with larger samples.

**Keywords:** coronary artery disease, anxiety, metacognition, cardiology

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**Tablo 1. Comparison of participants**

Variable	Healthy Control (n=74)	Coroner Artery Disease (n=43)	t/ $\chi^2$	df	p
Age (year)	60.40±6.23	60.72±6.49	-0.260	115	0.796
Gender			0.070	1	0.792
Female	55 (74.3%)	31 (72.1%)			
Male	19 (25.7%)	12 (27.9%)			
Beck Anxiety Inventory	9.75±7.91	13.83±6.34	-2.884	115	0.005*
MCQ-30 Positive Beliefs about Worry	11.10±4.20	12.02±3.77	-1.177	115	0.242
MCQ-30 Lack of Cognitive Confidence	11.85±4.18	13.69±4.23	-2.290	115	0.024*
MCQ-30 Negative Beliefs about Uncontrollability and Danger	11.13±3.46	14.16±3.34	-4.618	115	<0.001*
MCQ-30 Cognitive Self-Consciousness	15.71±3.60	16.46±2.62	-1.190	115	0.237
MCQ-30 Need to control thoughts	12.13±2.94	13.88±3.80	-2.595	115	0.011*

\*:p<0.05, MCQ-30: Metacognition Questionnaire 30

**[Abstract:0259] [Anxiety disorders]****0259 - Effects of covid-19 pandemic on anxiety and depression level in medical students**

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**BACKGROUND:** The 2019 coronavirus disease (COVID-19) was first seen in China and progressed into pandemic at March 2020. At the beginning of pandemic, mental health problems did not take great interest. However, it is currently well known that COVID-19 pandemic has serious effects on mental health. In present study, it is aimed to investigate anxiety and depression levels in a specific population as medical students.

**METHODS:** In present study, an anonymous survey was created for evaluation of anxiety and depression in medical school students. A link to the online questionnaire (SurveyMonkey) was sent to the participants which included sociodemographic data, Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS). Present study was approved by Local Ethics Committee. A cut off point is accepted as 21 for BDI.

**RESULTS:** Total 166 medical students were participated into study between the dates of April 2020 and May 2020. The mean age was  $20.6 \pm 3$ . years. According to BDI cut off point, 102 participants had depressive disorder. The mean scores of BAI and BHS were found to be significantly higher in depressive group ( $p < 0.05$ ). There were significantly and positive correlations between BDI score and BAI and BHS scores.

**CONCLUSION:** Present study showed that COVID-19 pandemic had serious effects on medical students in terms of having depression. This high rate of depression can be associated with high mortality risk of health workers during COVID-19 pandemic, the insufficient knowledge about COVID-19 in the early stages of pandemic and social isolation.

**Keywords:** anxiety, COVID-19, depression, mental

[Abstract:0264] [Obsessive-compulsive disorders (OCD)]

**0264 - The Clinical importance of psychological flexibility in treatment response of patients with obsessive compulsive disorder**

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**OBJECTIVE:** Psychological flexibility in psychopathology has gained importance in recent years. In this study, it is planned to investigate the role of psychological flexibility in clinical symptomatology and whether it has an effect on treatment response in individuals diagnosed with obsessive-compulsive disorder (OCD).

**METHODS:** The study included 50 patients diagnosed with “Obsessive Compulsive Disorder” according to DSM-5 diagnostic criteria and 42 healthy volunteers. Dimensional Obsessive-Compulsive Scale (DOCS) and Acceptance and Commitment Questionnaire (AAQ-2) were applied to the participants. The initial scale scores were compared with the post-treatment scores after three months of follow-up.

**RESULTS:** There was a significant difference in the DOCS and AAQ-2 scores between the patient and control groups. The correlation between the initial AAQ-2 scores and the post-treatment DOCS total scores and sub-dimension scores of contagion, unacceptable thoughts and symmetry was statistically significant. There was a statistically significant decrease in the DOCS total and sub-dimension scores and AAQ-2 total scores after treatment. There was a statistically significant correlation between the changes in AAQ-2 scores and DOCS total scores and the sub-dimensions of responsibility, unacceptable thoughts and symmetry after the treatment.

**DISCUSSION:** In this study, we found that the patients with OCD were more disadvantaged in terms of psychological flexibility compared to healthy individuals. Moreover, there was a significant relationship between psychological flexibility scores and OCD symptom severity. The patients with higher initial psychological flexibility responded better to psychopharmacological treatment. It can be concluded that the improvement in flexibility scores with the treatment had a positive effect on the response of OCD patients to treatment.

**Keywords:** Obsessive compulsive disorder, psychological flexibility, treatment response

[Abstract:0268] [Anxiety disorders]

**0268 - The sociodemographic features, comorbid psychiatric diagnosis, and treatment of children diagnosed anxiety disorder: follow-up study**

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**OBJECTIVE:** Anxiety disorders are the most common psychiatric disorders in the child population and may causes impairment in psychosocial functioning such as problems in social

relationships and academic failures at school. The aim of this study was to identify the sociodemographic features, comorbid psychiatric conditions and follow the treatment response after 6 -12 months, in 8–18 years old children with anxiety disorder.

**METHODS:** This prospective study consisted of 38 children between the ages 8- 18, presented to Kartal Dr. Lütü Kırđar City Hospital Child and Adolescent Psychiatry outpatient clinic between June 2021 and June 2022 who were diagnosed anxiety disorder according to DSM-V criteria. Patients who regularly followed up every month and received treatment were included in the study. Age, gender, comorbid diagnoses, and medication data were evaluated in all patients. The patients those aged 14-18 were evaluated with State- Trait Anxiety Inventory (STAI), and those aged 8-14 years were evaluated with The Screen for Child Anxiety Related Emotional Disorders (SCARED), baseline and endpoint. Baseline symptoms assessed Clinical global impression scale (CGI) Severity, endpoint symptoms assessed CGI global improvement. SPSS 22 was used for statistical analysis.

**RESULTS:** Of the 38 patients (mean age 14,53±2,51), 28 (73.7%) were girls. 28 (73,3%) of them were aged 14-18. 13 children (34,2%) had comorbid diagnoses. Sertraline (36,8%) was most commonly prescribed medication; followed by fluoxetine (21,1%), essitalopram (15,8%) and other drugs. CGI severity of illness scores: 4,55±0,64 (4-6), CGI global improvement scores: 2,07±0,96 (1-4)(p=0,000). STAI-S baseline score 51,28±10,37, STAI-S endpoint score 38,75±8,49 score (p=0,000). STAI-T baseline score 57,32±7,63, STAI-T endpoint score 42,96±9,35 score (p=0,000). SCARED baseline score 43,40±14,3, SCARED endpoint score 22,77±11,44 (p=0,000).

**CONCLUSIONS:** Further prospective studies with larger clinical samples and longer follow-up are needed to draw firm conclusions about psychopharmacological treatments on children.

**Keywords:** anxiety disorder, STAI, SCARED, CGI

#### [Abstract:0272] [Autism Spectrum Disorders]

#### 0272 - Serum neurofilament light chain protein levels in children and adolescents with autism spectrum disorder

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**OBJECTIVE:** Neurofilament light chain protein (NEFL) is defined as a structural protein that exists mainly in axons of neurons and is released in consequence of neuroaxonal damage. The study aims to analyze the role of NEFL protein in the etiopathogenesis of Autism Spectrum Disorder (ASD) by comparing the serum NEFL levels of ASD diagnosed children and adolescents with the healthy control group and investigating the relation between serum NEFL levels and ASD severity.

**METHODS:** The approval for the study was obtained from the Ethics Committee of the Ankara Yildirim Beyazit University Faculty of Medicine, Yenimahalle Training and Research Hospital with 2019/19 protocol number, on February 26th 2019. In this study, 53 ASD diagnosed

children and adolescent and 35 healthy children and adolescent are compared. To evaluate diagnoses and psychiatric comorbidities of the patients and healthy control group, DSM-V based psychiatric diagnostic examination, and K-SADS-PL and sociodemographic and clinical data form were applied to both groups. In addition, Childhood Autism Rating Scale (CARS), Aberrant Behavior Checklist (ABC), Clinical Global Impressions-Severity (CGI-S) scales were applied to the ASD group. Serum NEFL levels were compared between groups.

**RESULTS:** There were no significant differences between ASD and the control groups and also among ASD groups which were categorized according to symptom severity in respect of serum NEFL levels. In the ASD group, no linear relationship was found between serum NEFL levels and the CARS, CGI-S, ABC total/ subscales scores.

**CONCLUSION:** In conclusion, this study demonstrated no difference between ASD and control groups regarding serum NEFL levels. The fact that serum NEFL level, which is a reliable marker in detecting neuron damage, does not differ between groups, suggests that neurodegeneration does not continue in ASD. It might be helpful to examine the NEFL level in the differential diagnosis of ASD with neurodegenerative diseases that can show clinically similar symptoms.

**Keywords:** Autism Spectrum Disorder, Children, NEFL, Neurodegeneration, Neurofilament, Neuronal Damage

[Abstract:0277] [Others]

### 0277 - Effects of electroconvulsive therapy (ECT) on hematologic parameters

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**BACKGROUND and OBJECTIVE:** Electroconvulsive therapy (ECT) is an important treatment method based on the principle of stimulating the brain with controlled currents and causing the patient to have generalized seizures. It is accepted as one of the most effective and safe treatment practices used in current psychiatry practices. Although there have been many reports about the effects and side-effects of ECT, there are currently no known hematological contraindications. In this study, we aimed to investigate whether there is a significant change in hematological parameters in patients who underwent ECT.

**METHODS:** In this study we included 31 patients who were underwent ECT between 2019-2022. The blood parameters (RBC, WBC, Hemoglobin, Neutrophils, Lymphocytes, Platelets, Neu/Lym ratio) of the patients were examined before the ECT sessions were started and after the ECT sessions were ended.

**RESULTS:** Of the 31 patients, 13 were diagnosed with psychotic disorder and 18 were diagnosed with mood disorder. There was no significant difference in neutrophil count, lymphocyte count, neutrophil/lymphocyte ratio and CRP values before and after ECT treatment ( $p>0.05$ ). Similarly, there was no significant difference in terms of hemoglobin, erythrocyte, leukocyte and thrombocyte values ( $p>0.05$ ). Additionally, no significant difference was found between the number of ECT sessions and hematological parameters ( $p>0.05$ ).

**DISCUSSION:** The limited number of studies in the literature have reported conflicting results regarding the hematological effects of ECT. Although some studies showed significant differences in RBC, leukocyte count, and Hb values in the early period after ECT, there are some studies that did not show a significant changes on hematologic parameters. Our study showed that ECT did not cause a significant change in hematological parameters, suggesting that ECT may be a safe treatment option in patient groups with hematological diseases.

**Keywords:** electroconvulsive therapy, psychotic disorders, affective disorders, safety, inflammation

**Keywords:** electroconvulsive therapy, psychotic disorders, affective disorders, safety, inflammation

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## [Abstract:0281] [Disruptive behavior disorders]

### **0281 - Post-Traumatic stress/growth and resilience reactions of adolescents exposed to Elazig 2020 Earthquake and stayed in a container city: a preliminary report**

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**OBJECTIVE:** The reaction of children and adolescents to natural disasters has long been a question of great interest in a wide range of fields. Natural disasters such as earthquakes are associated with an increased risk of post-traumatic stress disorder. However, it can also be associated with post-traumatic growth, and in this context, resilience is an important phenomenon. This study highlights the importance of post-traumatic stress/growth and the resilience of adolescents who have stayed in a container city after the Elazig earthquake.

**METHODS:** The participants were divided into two groups based on their stay in the container city of Elazig after the earthquake. Only children aged between 12 and 18 years were included in the study. The sample consisted of 70 adolescents, 50 of whom stayed in the container city. The questionnaires were designed to measure the following constructs: Sociodemographic Data Form, Post Traumatic Response Scale, Post Traumatic Growth Inventory, Multidimensional Scale of Perceived Social Support, and Child and Adolescent Psychological Resilience Scale. Ethical approval was granted by the Firat University's ethics committee (2022/ 08- 26). All analyses were carried out using SPSS, version 20.

**RESULTS:** No significant differences were found between age, gender, educational status, psychiatric or non-psychiatric disorders, post-traumatic stress response, perceived social support, and psychological resilience scores. The single most striking observation to emerge

from the data comparison was the post-traumatic growth score. The scores in the case group were higher than the control group. ( $p=0.001$ ).

**CONCLUSIONS:** Although this study focuses on traumatic stress/growth and resilience, the findings, particularly traumatic growth, may well have a bearing on adolescents experiencing such a disaster. This preliminary report has thrown up many questions in need of further investigation, thus large randomized controlled trials could provide more definitive evidence.

**Keywords:** traumatic growth, social support, resilience, adolescent

[Abstract:0285] [Mood disorders]

### 0285 - The Relationship Between the frequency of hopelessness, depression and the levels of cognitive distortion in medical faculty students

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**INTRODUCTION:** Depression and hopelessness are important problems that cause the person to lose productivity and deteriorate the quality of life (1). Cognitive distortions can be defined as features of thought that function to cause misinterpretation of an event (2). Cognitive distortions negatively affect people's future expectations, problem-solving methods and the process of adaptation to the environment, causing hopelessness in individuals (3). The aim of this study is to investigate the relationship between hopelessness, depression frequency and cognitive distortion levels in medical school students.

**METHODS:** 90 students were included and 86 students (95.5%) agreed to participate into the study. The students were administered a questionnaire to determine their socio-demographic characteristics, the Beck Depression Scale, the Beck Hopelessness Scale and the Cognitive Distortions Scale. Those who scored 17 or higher on the Beck depression scale were classified as likely depressive. The data were evaluated statistically. This study was approved by local ethical committee (Decision Date: 13.09.2022, Decision number: 72).

**RESULTS:** 42 (48.8%) male, 44 (51.1%) female, 86 students with a mean age of  $21.9 \pm 2.8$  were included in the study. The Beck Hopelessness Scale mean score of the students was  $7.27 \pm 4.54$ , and 24 (27.9%) of the students were found to be possibly depressed according to the Beck Depression Inventory. A statistically significant positive correlation was found between the participants' cognitive distortion levels and hopelessness ( $r=0.583$ ,  $p=0.003$ ) and depression ( $r=0.316$ ,  $p<0.001$ ) levels. When hopelessness and depression levels were compared in terms of Cognitive Distortions Subscales; participants with significant depressive symptoms compared to participants without, a statistically significant increase was found in the subscale scores of mindreading ( $p=0.004$ ), catastrophizing ( $p=0.048$ ), emotional reasoning ( $p=0.002$ ), labeling ( $p=0.001$ ), overgeneralization ( $p=0.017$ ) personalization ( $p=0.043$ ), should statements ( $p=0.043$ ) and minimizing the positive ( $p=0.048$ ).

**CONCLUSION:** In our study, it was found that cognitive distortions were higher in students with high levels of hopelessness and depression. It would be appropriate to provide psychoeducation to medical school students to reduce the effects of depression and hopelessness that may reflect on their private and professional lives and to establish psychological support units that they can easily reach if necessary.

**Keywords:** hopelessness, depression, cognitive distortions

[Abstract:0304] [Others]

**0304 - The Effects of liraglutide on NLRP3 Inflammasome Activation and cognitive-behavioral changes in the lithium-pilocarpine-induced temporal lobe epilepsy model in rats**

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**OBJECTIVES:** Glucagon-like peptide-1 receptor agonists (GLP-1RAs) have neuroprotective effects in several neurodegenerative diseases. The objective is to examine effects of liraglutide (a GLP-1RA, undergoing phase-2 clinical trials) on NLRP3 pathway and cognitive-behavioral changes of epileptic animals.

**METHODS:** Epileptic and healthy control rats were treated with saline and liraglutide. Temporal lobe epilepsy was formed by inducing status epilepticus (SE) with low-dose repetitive lithium chloride–pilocarpine hydrochloride intraperitoneal injections. Liraglutide (300 g/kg/day) or 0.9% saline (1 mg/kg/day) intraperitoneal injections were started three hours after SE and continued for three days. Half of each group was sacrificed to examine alterations after the three-days-treatment while surviving-rats were subjected to cognitive-behavioral tests (open field, elevated plus maze, Morris water maze tests) three weeks after SE. The blood samples, whole brain and hippocampal tissues were examined. Mitochondrial dysfunction and dynamics were investigated in peripheral blood mononuclear cells and hippocampal tissues, respectively. Inflammation (NLRP3, Caspase-1, IL-1 $\beta$ ), antioxidant pathways' (Nrf-2, phospho-Nrf-2, malondialdehyde and glutathione) related proteins were analyzed on hippocampal tissues.

**RESULTS:** Mitochondrial-dynamics-related proteins Pink1, Mfn2 and antioxidant phospho-Nrf2 levels increased, while inflammation-related proteins NLRP3, IL-1 $\beta$ , and Caspase-1 decreased in liraglutide-treated-epileptic rats. Malondialdehyde decreased in short-term, while glutathione increased in long-term. Healthy liraglutide-treated controls' locomotor activity and anxiety were increased. In epileptic rats liraglutide also reduced the movement-enhancing effect of epilepsy whereas it did not ameliorate anxiety. Epileptic rats or healthy controls' learning and memory capacity were not affected by liraglutide. This work is supported by Acibadem University Scientific Research Projects Commission (Grant number:2021/02/09).

**CONCLUSION:** Healthy and epileptic rats' mitochondrial dynamics and antioxidant capacity were altered upon liraglutide treatment. Liraglutide had cognitive-behavioral impacts on both healthy and epileptic rats. Our results indicate that liraglutide treatment have an impact on cellular pathways in epileptic rats.

**Keywords:** Epilepsy, liraglutide, behavior, inflammation, oxidative stress



**[Abstract:0305] [Psychosomatic medicine-Liaison psychiatry]**

**0305 - Eating behaviour and psychiatric comorbidities among bariatric surgery candidates**

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**OBJECTIVE:** Bariatric surgery candidates undergo psychiatric assessment prior to surgery in order to detect any psychopathology which might be considered as contraindication or might have an impact on the outcome of the intervention. There is some evidence that patients seeking surgery have higher psychiatric comorbidity including feeding and eating disorder (FED). Grazing, which is a newly defined eating behaviour, has been also reported to be associated with obesity. The aim of this study was to investigate the frequency of grazing behaviour, FEDs and other psychiatric comorbidities among bariatric surgery candidates. In the current presentation, we will discuss the preliminary findings of our study.

**METHODS:** Subjects were recruited at the outpatient clinic of the Department of Psychiatry of Goztepe Prof. Dr. Süleyman Yalçın City Hospital, where they were referred by the Department of General Surgery. Data were collected by using socio-demographic form designed by the researchers, and psychiatric comorbidities were investigated by means of the Structured Clinical Interview for DSM-5 Disorders. Subjects also underwent a specific assessment for grazing behaviour by using a Repetitive Eating Questionnaire (Repeat-Q).

**RESULTS:** The sample consisted of 36 subjects: 29 females and 6 males. Two thirds were married and half were middle school graduates. Out of patients assessed, 45,7 % (16) had binge eating disorder (BED), 20 % (7) night eating disorder, 5 % (2) other psychiatric comorbidities. In their past psychiatric history, 2.9 % (8) BED, 20 % (7) night eating disorder, 48.6 % (17) other psychiatric disorders. Grazing behaviour were significantly more common in patients with BED ( $p=0.002$ ).

**DISCUSSION:** Our study reveals that there is a significant psychiatric morbidity in particular FEDs among surgery candidates, which should be carefully monitored throughout the surgical process. There was also strong association of BED with grazing behaviour, specifics of which can be delineated on a larger sample with the ongoing study.

**Keywords:** bariatric surgery, eating disorders, grazing, psychiatric comorbidities, obesity

**[Abstract:0312] [Epidemiology]**

**0312 - Examination of psychiatric consultations requested from patients applying to the emergency department of a training and research hospital**

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**INTRODUCTION:** Psychiatric emergencies are clinical situations in which thought, emotion and behavioral disorders in individuals pose a threat to the patient or other people and require urgent psychiatric help. Emergency psychiatric conditions are also seen in chronic mental diseases such as schizophrenia, psychotic disorder, bipolar disorder, medical disorders with

psychiatric symptoms, intoxication, substance use, drug side effects and psychosocial stress disorders. In this study, it was aimed to examine the sociodemographic characteristics, diagnoses and treatment approaches of patients who were asked for psychiatric consultation by the emergency department of a training and research hospital.

**METHOD:** In this cross-sectional and relationship-seeking study, the medical records of patients who were requested for psychiatric consultation by the Istanbul Sultan 2.Abdülhamid Han Training and Research Hospital Emergency Service between 01.01.2017-31.12.2019 were retrospectively examined. Demographic information of the patients included in the study, past psychiatric diagnoses and treatments, application complaints, reasons for requesting consultation, psychiatric diagnoses and treatments received, and hospitalization status were recorded through the created data form. Patients under the age of 18 were not included in the study. The information we obtained from the forms we created for the study were classified according to DSM-V diagnoses for statistical evaluation. Descriptive statistics were used in the study.

**RESULTS:** A total of 544 people, 61.8% (n=336) male, 38.2% (n=208) female, participated in the study and the mean age was 35.98±30.00. 56.6% (n=308) of the participants were single, 31.8% (n=173) were high school graduates. 51.3% (n=279) presented to the emergency department for the first time. 59.9% had a history of psychiatric illness and 59.4% were using psychotropic drugs. In their past psychiatric illness histories, 31.6% (n=172) of the cases were not diagnosed with a psychiatric diagnosis, 29.9% (n=158) had anxiety disorder, 14.9% (n=81) had depressive disorder, 10.8% (n=59) were diagnosed with bipolar disorder, 10.8% (n=59) substance abuse, 10.5% (n=57) psychotic disorder. Among the reasons for seeking consultation, 37.5% (n=204) agitation, 31.6% (n=172) depressive symptoms, 19.9% (n=108) suicide attempt, 12.5% (n=68) suicidal thoughts, 20.6% (n=112) psychotic symptoms were present. As a result of the mental examination, 6.1% (n=33) of the cases did not receive any psychiatric diagnosis. 41.7% (n=227) anxiety disorder, 23.0% (n=125) depressive disorder, 7.5% (n=41) adjustment disorder, 8.3% (n=45) bipolar disorder, 12.7% (n=69) was diagnosed with psychotic disorder. Of the participants, 29.0% (n=158) received antipsychotic medication, 27.9% (n=152) received antidepressant medication, 22.1% (n=120) received anxiolytic medication, and 40.6% (n=221) It was decided to follow up without treatment. 36.4% (n=198) of the cases were hospitalized. The most common causes of hospitalization were 42.4% (n=84) depressive symptoms, 32.8% (n=65) suicide attempts, 31.3% (n=62) psychotic symptoms, 23.2% (n=46) agitation, and 22.2% (n=44) suicide were their thoughts. The most common diagnoses in hospitalized patients were depressive disorder 33.3% (n=66), anxiety disorder 26.8% (n=53), psychotic disorder 18.7% (n=37) and bipolar disorder 12.1% (n=24).

**CONCLUSION:** The fact that the majority of the patients who applied to the emergency service in our study were male and that half of the cases presented to the emergency department for the first time were among the interesting findings of the study. The fact that a very small portion of the cases do not receive a psychiatric diagnosis, that the patient has not received psychotropic drug treatment to a significant extent, and that these individuals apply to psychiatry clinics at other times, is important in terms of reducing the burden of the emergency department. There is limited evidence on the patient profile of people presenting to emergency services for mental health reasons, and this study adds to this literature.

**Keywords:** consultation, hospitalization, psychiatric emergency, psychotrop drug

[Abstract:0331] [Obsessive-compulsive disorders (OCD)]

**0331 - Psychometric Properties of the Turkish Version of the Children's Saving Inventory in a Clinical Sample**

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**OBJECTIVE:** The Children's Saving Inventory (CSI) is a measurement tool developed to assess hoarding behavior in children as rated by parents. This study aims to investigate the psychometric properties of the Turkish version of the CSI in a clinical sample of children and adolescents.

**METHODS:** The study sample consisted of 52 children and adolescents in the 8-17 age group who were diagnosed with Obsessive-Compulsive Disorder (OCD) and their families. As a structured diagnosis interview, the Development and Well-Being Assessment (DAWBA) was applied to all participants. OCD and comorbid psychiatric disorders were diagnosed with DAWBA. Hoarding Disorder (HD) was diagnosed with clinically based on the DSM-5 diagnostic criteria. The Children's Yale-Brown Obsessive-Compulsive Scale Symptom Checklist (CY-BOCS) was applied by an experienced clinician. The parents and children independently filled out the Obsessive-Compulsive Inventory—Child Version (OCI-CV) and CSI scales.

**RESULTS:** The 20-item CSI Turkish version demonstrated good internal consistency for both the total score and factor structures. Four-factor structure of the scale was confirmed by the confirmatory factor analysis. CSI showed convergent and discriminant validity with OCI-CV and CY-BOCS sub-scales, and the higher CSI total scores in children and adolescents diagnosed with HD confirmed the construct validity.

**CONCLUSIONS:** These findings support that the CSI Turkish version can be used as a valid and reliable scale to investigate the hoarding behavior of children and adolescents in a clinical sample. In addition, the CSI Turkish version is currently the only validated instrument to evaluate hoarding behavior in children and adolescents as rated by parents in Turkish population.

**Keywords:** Hoarding, Obsessive-compulsive-disorder, Children's saving inventory, Reliability, Validity

[Abstract:0332] [Anxiety disorders]

**0332 - Evaluation of subclinical cardiovascular risk in drug-naive pediatric patients with anxiety disorders**

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**OBJECTIVE:** There is a large gap in the literature on non-invasive measures of subclinical atherosclerosis, which can be determined as a cardiovascular risk indicator in children and adolescents with anxiety disorders. This study, it was aimed to evaluate subclinical atherosclerosis with non-invasive measures and to investigate the clinical features associated with subclinical atherosclerosis in drug-naive children with anxiety disorders.

**METHODS:** This study included 37 drug-naive children and adolescents with anxiety disorders (21 girls, 16 boys) and 37 healthy controls (20 girls, 17 boys). The sample was assessed using the Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL). The Children's Depression Inventory (CDI) and the State-Trait Anxiety Inventory (STAI-T and STAI-S) were used to assess children's depression and anxiety levels. Carotid artery intima media (cIMT), epicardial adipose tissue (EAT), and periaortic adipose tissue (PAT) thicknesses, which are indicators of subclinical atherosclerosis, were obtained by echocardiographic measurements.

**RESULTS:** There was a significant main effect was found on both groups for cIMT, EAT thickness, and PAT thickness values, independent of confounding factors such as age, sex, body mass index, mean blood pressure, and family income in the multivariate analysis of covariance (MANCOVA) test (Pillai's Trace  $V = 0.758$ ,  $F(1, 72) = 35.595$ ,  $p < 0.001$ ,  $\eta^2 = 0.758$ ). Analysis of covariance (ANCOVA) showed that cIMT, EAT thickness, and PAT thickness values were significantly higher in the anxiety disorder group than in the control group ( $p < 0.001$ ). A positive correlation was observed between STAI-T and cIMT and EAT thickness in partial correlation analysis. In linear regression analyses, age and STAI-T emerged as significant predictors of cIMT levels, while age, male gender, and STAI-T positively predicted EAT thickness levels.

**CONCLUSIONS:** Our findings suggest that subclinical cardiovascular risk is significantly increased in children and adolescents with anxiety disorders. More research is needed to elucidate the causal relationship between cardiovascular risk and pediatric anxiety disorder.

**Keywords:** anxiety disorders, cardiovascular risk, carotid intima-media thickness, epicardial adipose tissue thickness, periaortic adipose tissue thickness, subclinical atherosclerosis

[Abstract:0333] [Attention deficit hyperactivity disorder (ADHD)]

### 0333 - Investigation of the effects of ODD comorbidity on internalization and externalization symptoms in children with ADHD

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**OBJECTIVE:** Oppositional Defiant Disorder (ODD) is the most common psychiatric disorder that co-occurs with Attention Deficit Hyperactivity Disorder (ADHD). This study aimed to determine the areas in which children and adolescents with ADHD with and without ODD comorbidity have difficulties and to evaluate the symptoms of internalization and externalization.

**METHODS:** 23 children and adolescents with ADHD (13 boys, 10 girls) and 23 children and adolescents (20 boys, 3 girls) with ADHD+ODD were included in the study. The study sample was assessed using the Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL). Strengths and difficulties questionnaire (SDQ) to identify the areas of difficulty experienced by children, to evaluate depression and anxiety levels the revised child anxiety and depression scales (RCADS) were used to be graded separately by children and their parents.

**RESULTS:** In children's reports, emotional problems, peer problems, internalization, total difficulty, and depression scores were found to be significantly higher in the ADHD+ODD group than in the ADHD group ( $p < 0.05$ ). It was found that behavioral problems, attention deficit/hyperactivity, externalization, total difficulty, anxiety, and depression scores on parent scales were higher in the ADHD+ODD group compared to the ADHD group. In binary logistic regression analysis, in which the predictive factors related to the presence of ODD comorbidity were examined, it was determined that externalizing symptoms such as behavioral problems and attention-deficit/hyperactivity obtained from parent-rated SDQ subscales predicted ODD.

**CONCLUSIONS:** Our findings suggest that the presence of ODD comorbidity causes an increase in internalizing and externalizing symptoms in children with ADHD, and the reports of children and parents through subjective and objective experiences may differ from each other.

**Keywords:** attention deficit hyperactivity disorder, oppositional defiant disorder, internalizing, externalizing, symptoms

[Abstract:0337] [Anxiety disorders]

### 0337 - Evaluation of personality and cognitive traits in individuals with panic disorder: comparison of clinical and healthy groups

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**BACKGROUND:** Panic disorder is a mental disorder that develops as a result of catastrophic misinterpretation of bodily sensations which reinforced by non-adaptive avoidance and safety-providing behaviors. Although panic disorder can be seen with all personality beliefs, it is more common with cluster C personality beliefs. It can contribute to the therapy process of patients to determine the relationship between personality beliefs, cognitive process and anxiety. In this study, we aimed to examine the relationship between panic disorder severity and cognitive process and personality beliefs.

**METHODS:** Forty five individuals diagnosed with panic disorder and 31 healthy volunteers participated in the study. Sociodemographic data form, panic disorder severity scale, personality belief questionnaire-short form, automatic thoughts questionnaire, dysfunctional attitude scale, state - trait anxiety inventory, Beck depression inventory and Beck anxiety inventory were applied to the participants.

**RESULTS:** All scale scores of the patient group were higher than the control group. The patient group had significantly higher avoidant, dependent, passive-aggressive, antisocial, narcissistic, paranoid and borderline personality beliefs scores compared to the healthy group, Avoidant, dependent, narcissistic and borderline personality beliefs were significantly higher in the group with high panic disorder severity.

**CONCLUSION:** Panic disorder have high levels of negative automatic thoughts and intermediate beliefs. When anxiety was excluded, no personality beliefs were correlated with state anxiety, while trait anxiety was associated with avoidant, dependent, borderline personality. Anxiety might be more related to intermediate beliefs. Personality beliefs are more prominent in individuals with high levels of panic disorder.

**Keywords:** Panic disorder, personality beliefs, automatic thoughts, dysfunctional attitudes

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[Abstract:0339] [Attention deficit hyperactivity disorder (ADHD)]

### 0339 - Evaluation of serum heat shock protein (HSP)-70 levels of children with attention deficit and hyperactivity disorder

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**Introduction:** Attention deficit hyperactivity disorder (ADHD) is one of the most common neurodevelopmental disorders in children and adolescents. Studies examining the pathophysiology of ADHD examine the relationship between ADHD and immune and oxidative imbalances. Heat shock protein-70 (HSP-70) is an oxidative stress-related protein and has many functions, such as regulation of stress response in the system, protein folding and degradation of irreversibly damaged proteins, and anti-apoptotic effect. The aim of our study is to evaluate HSP-70 level in children with ADHD.

**Methods:** 21 children diagnosed with ADHD and 21 healthy children were included in this study. Patients who were diagnosed with ADHD according to DSM 5 diagnostic criteria and did not use treatment were included in the study. An enzyme-linked immunosorbent assay (ELISA) kit was used to evaluate the serum HSP-70 level. Written informed consent was obtained from the patients and their families.

**Results:** The mean age of the ADHD group was  $12.10 \pm 2.21$  and the mean age of the control group was  $13.10 \pm 1.30$ . There was no significant difference between the groups in terms of age and gender. Psychiatric comorbidity was found in 52.4% of the children in ADHD group. When HSP-70 levels were evaluated, no statistically significant difference was found between the ADHD group (mean: 6.58 ng/ml) and the control group (mean: 5.81 ng/ml) ( $p=0.148$ ). (Table 1) There was no significant relationship between gender and serum HSP-70 level in ADHD group ( $p>0.05$ ). (Table 2) In ADHD group, HSP-70 level of children with psychiatric comorbidity was found to be significantly lower than those without comorbidity ( $p=0.036$ ) (Table 3)

**Conclusion:** In our study, no significant relationship was found between HSP-70 and ADHD, but HSP-70 level was found to be low in patients with psychiatric comorbidity. Our results suggest that HSP-70 is not associated with ADHD pathophysiology. More detailed and large-scale studies are needed to explain the relationship between ADHD and HSP-70 levels.

**Key words:** Attention deficit hyperactivity disorder, neurodevelopmental disorders, heat shock protein 70, oxidative stress, child

**Keywords:** Attention deficit hyperactivity disorder, child, heat shock protein 70, neurodevelopmental disorders, oxidative stress,

Table 1: Comparison of variables between patient and control group

	Control group (n=21)	Patient group(n=21)	p
Age	13,10 $\pm$ 1,30 [10-15]	12,10 $\pm$ 2,21 [9-16]	0,083
Gender, n(%)			
Female	11 (52,4)	9 (42,9)	0,537
Male	10 (47,6)	12 (57,1)	
Presence of psychiatric comorbidity , n(%)	0 (0,0)	11 (52,4)	<0,001
HSP-70 ng/dl	5.81 (6.18) [4.54-40.76]	6.58 (6.84) [4.45-56.87]	0,148

\* descriptive statistics are given as mean $\pm$ standard deviation or median (interquartile range, Q3-Q1) [minimum-maximum].

Table 2: Comparison of gender with age, psychiatric comorbidity and HSP-70 level in the Patient Group

	Female (n=9)	Male (n=12)	p
Age	12,67 $\pm$ 2,12 [9-15]	11,67 $\pm$ 2,27 [9-16]	0,317
Presence of psychiatric comorbidity, n(%)	4 (44,4)	7 (58,3)	0,670
HSP-70 ng/ml	6.87 (7.28) [5.68-38.64]	6.35 (6.70) [4.45-56.87]	0,247

\* descriptive statistics are given as mean $\pm$ standard deviation or median (interquartile range, Q3-Q1) [minimum-maximum].

Table 3: Comparison of psychiatric comorbidity with age and HSP-70 levels in the Patient Group

	<b>Without comorbidity (n=10)</b>	<b>Psychiatric comorbidity (n=11)</b>	<b>p</b>
<b>Age</b>	12,30±2,45 [9-16]	11,91±2,07 [9-15]	0,697
<b>HSP-70 ng/ml</b>	7.48 (20.96) [5.68-56.87]	6.32 (4.64) [4.45-38.64]	<b>0,036</b>

\* descriptive statistics are given as mean±standard deviation or median (interquartile range, Q3-Q1) [minimum-maximum].



## **Poster Research Presentations**

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13th International Congress on Psychopharmacology &  
9th International Symposium on Child and Adolescent Psychopharmacology

**[Abstract:0026] [Schizophrenia and other psychotic disorders]**

**0026 - Psychotic symptoms in 14-years-old adolescent boy with intellectual disability**

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**INTRODUCTION:** The difficulties experienced by some youth with mild and borderline intellectual disabilities can be associated with increased risk for schizophrenia (1). Comorbidity between neurodevelopmental disorders and psychotic disorders is common, but it's not clear how neurodevelopmental disorders influence the first episode psychosis (2).

**CASE PRESENTATION:** In this case report, we examine 14 years old adolescent boy who was referred to the outpatient clinic with complaints of paranoid behavior, obsessions, and rage. The patient was diagnosed with mild intellectual disability at 8 years-old. Before his symptoms started, he was described as an adolescent with good social relations and no behavioral problems at school. For the last year, he began to exhibit symptoms such as aggression, pulling a knife on his sibling, and thinking that he was receiving messages through songs. His symptoms worsened when he was insulted on an online platform game, he began to constantly check his mailbox for court papers thinking that he was being sued.

On the mental status examination, his demeanor wasn't cooperative. His eye contact was avoidant. He seemed paranoid, his affect was consistent with the mood. His thought process and thought content was inappropriate, he stated in a low voice that there were people who wanted to harm him, and he was being sued. He had auditory hallucinations. His appetite was normal, but she had significant difficulty sleeping. The medical history was unremarkable. On the initial assessment, the patient's PANSS scores were positive 27 negative 18 general 38 total of 83. Aripiprazole 10 mg/day was prescribed, and the dosage slowly titrated up to 25 mg/day in two weeks. Positive symptoms gradually diminished, however obsessive symptoms persisted. Escitalopram 10 mg was added to treatment. 2 months later PANSS score dropped to 54. Daily functioning improved significantly, aggression and rage complaints disappeared. The patient still has slightly inappropriate thought content. Treatment and follow-up are being continued.

**CONCLUSION:** With this case report, we aimed to show that children with intellectual disability are at risk for psychosis, and the differential diagnosis should be meticulously done in detail when unexpected behavioral problems develop.

1-10.1192/bjp.bp.106.033514

2- 10.1016/j.eurpsy.2018.09.007

**Keywords:** Psychosis, intellectual disability, aripiprazole, adolescent

**[Abstract:0040] [Eating disorders]**

**0040 - A Severe arfid case after aspiration with food: The Importance of multidisciplinary intervention**

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**INTRODUCTION:** Avoidant Restrictive Food Intake Disorder (ARFID) is an eating/feeding disorder characterized by restricted food intake. ARFID patients differ in clinical presentation regarding the age of onset, weight status, duration of symptoms and prognosis. The first admission to pediatric clinics is not uncommon among ARFID patients. Their consultation at the child psychiatry clinics may take a long time, and diagnostic workups for organic diseases might be very exhausting for patients and their families. We present a severe case of ARFID who admitted primarily to the pediatric clinic.

**CASE:** The 7-year-old girl was consulted at our child psychiatry clinic by the pediatrician with the complaint of repeating aspiration of foods, fear of suffocation and food intake refusal. When we look at her medical history, two weeks before her pediatric unit hospitalization, she aspirated the pasta she was eating and had choking episodes two times the same day. Then she started to fear aspiration increasing gradually and prolonging the mealtime. Her food intake was gradually restricted. Her water intake also decreased. Two weeks after the first episode, the patient was hospitalized in the pediatric gastrology unit for diagnostic investigation. After hospitalization, organic pathologies were investigated by her physicians. The problem worsened over the days, and she could not swallow her saliva. A week later, she rejected food intake ultimately, and nasogastric probe insertion was tried. After probe insertion, she described the sensation of having feathers on her tongue and tried to clean her tongue with a high amount of water repeatedly. Eventually, parenteral feeding was required. The patient's oropharynx examinations, chest x-ray and upper gastrointestinal series, and swallowing physiology were all regular.

As the organic pathologies were ruled out, the patient was consulted at Child Psychiatry Department.

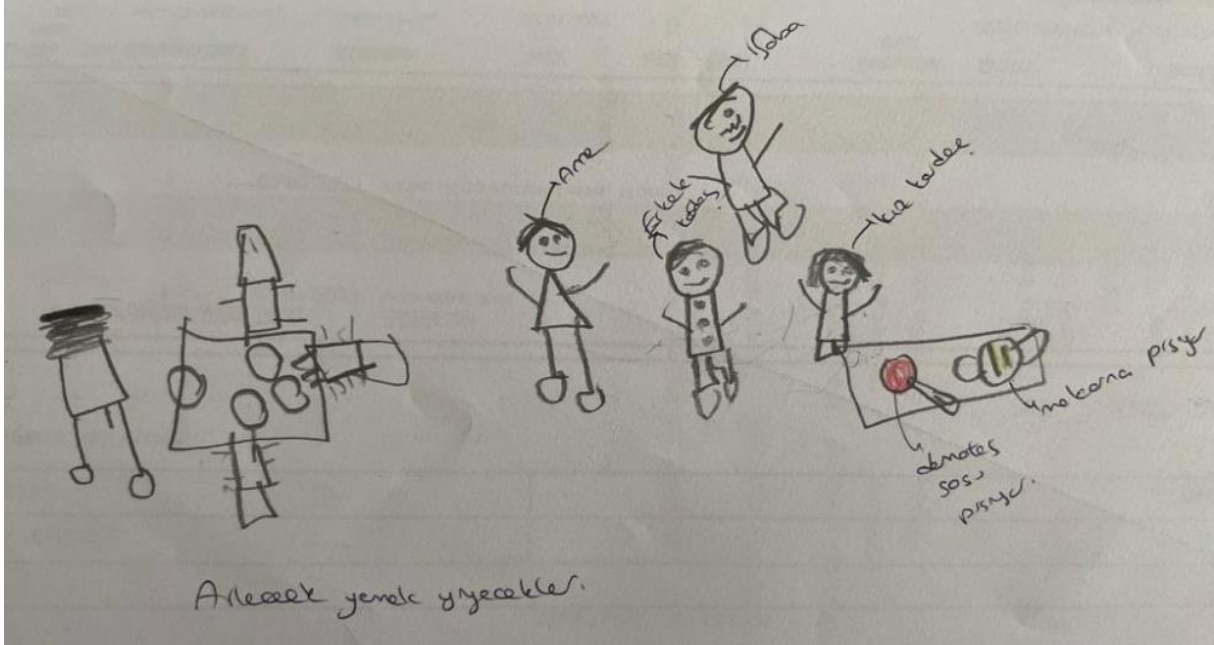
Considering the diagnosis of ARFID, she transferred to the child psychiatry inpatient unit for behavioral interventions. Patient had an acute 1 kg loss until hospitalization in pediatric service. She was 20 kg and 127 cm when she first examined in child psychiatry inpatient unit. Her eating concern was in her thought content and picture drawings. Ending conversations about eating and having more mother-daughter time were recommended. In the interview with her, the anatomy of the respiratory and gastrointestinal tract was drawn, the mechanism of coughing was explained in this elementary drawing. A list of her favourite foods was made, and she started to eat her favourite foods. The amount of food was gradually increased as tolerated. Also, her psychiatrist planned her psychotropic medication as escitalopram and risperidone.

As her fear of swallowing gradually decreased, the variety of foods she consumed increased. During her hospitalization, she gained 2.2 kg. After two weeks of hospitalization in the child psychiatry inpatient clinic, the patient was discharged. She was referred for occupational therapy evaluation for possible sensory sensitivities. Weekly follow-ups showed that eating diversity had almost returned to normal.

**CONCLUSIONS:** ARFID is a clinical condition with heterogeneous clinical presentation. Education and awareness of pediatric clinicians about ARFID, could be beneficial for early recognition and multidisciplinary intervention for ARFID patients.

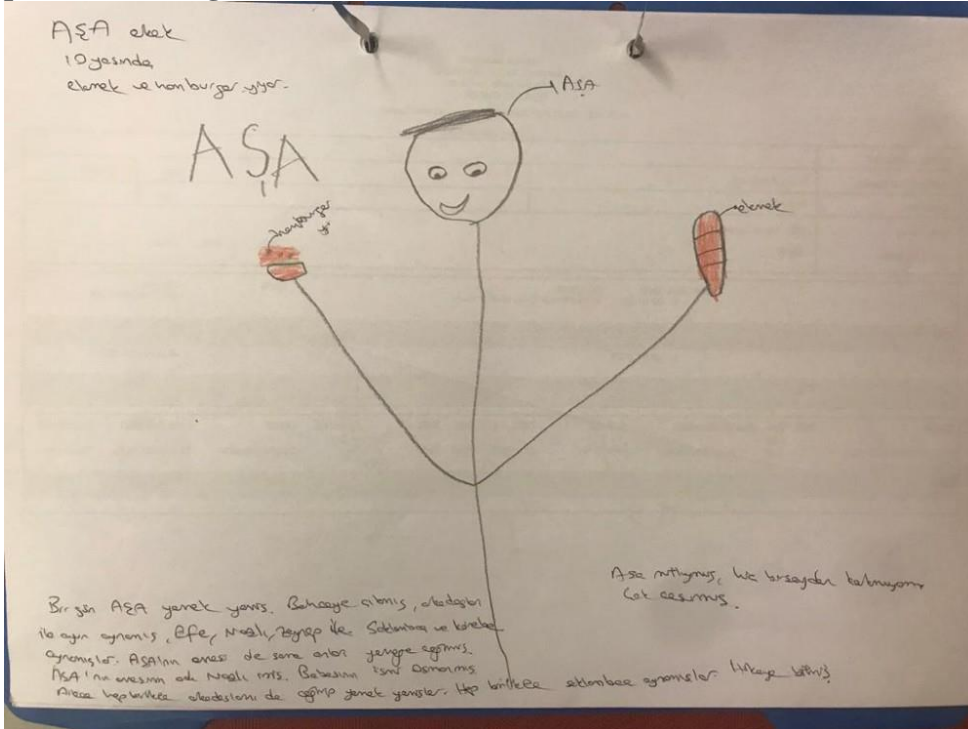
**Keywords:** ARFID, pediatric, eating disorders, multidisciplinary intervention

### patient drawing 1



When the patient is asked to draw a picture, one of the pictures drawn by the patient

### patient drawing 2



When the patient is asked to draw a picture, one of the pictures drawn by the patient

**[Abstract:0047] [Tic disorders]**

**0047 - PANDAS with rheumatic carditis: A Case report**

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**INTRODUCTION:** Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS) refer to cases that develop neuropsychiatric disorders such as sudden onset tic disorder and/or obsessive-compulsive disorder (OCD) triggered by Group-A beta-hemolytic streptococcal (GAS) infection. Acute rheumatic fever (ARF) is an inflammatory disease that develops after GAS infection and can affect many organs, especially joints, heart and brain. In this report, we aimed to present a case who was diagnosed with rheumatic carditis due to ARF while being followed up with chronic tic disorder and suspected PANDAS.

**CASE:** A fifteen-year-old girl was admitted to our outpatient clinic with vocal tics in the form of throat clearing and motor tics in the form of throwing in her hands and arms. The patient's complaints started with vocal tics approximately seven years ago, and motor tics were added two years later after a severe upper respiratory tract infection (URTI). It was learned that during the periods when the patient had an URTI, her tics increased significantly, she was more irritable and had behavioral problems with hyperactivity and attention problems. The patient's family history included OCD in the mother, vocal tic in the aunt and grandmother. The patient was started on risperidone treatment for tic disorder. Since the tics of the patient exacerbated after URTI, the tics started in the prepubertal period and showed an episodic course, it was thought that the patient might have PANDAS. The patient's antistreptolysin-O (ASO) levels, which were measured with an interval of fifteen days, were found to be elevated, the second being higher. The patient was consulted with pediatric cardiology and neurology in order to exclude ARF. The patient's existing movement disorders were not evaluated as chorea in the pediatric neurology evaluation. Due to minimal mitral regurgitation on echocardiography, the patient was diagnosed with rheumatic carditis by the pediatric cardiologist and depot penicillin prophylaxis was started.

**CONCLUSION:** It is important to distinguish PANDAS from Sydenham chorea (SC), OCD and tic disorder. The case meets the diagnostic criteria of PANDAS with the age of onset of tics, aggravation of tics during URTI periods, the gradual increase in ASO level that we detected in the exacerbation phase during our follow-up, and additional neuropsychiatric symptoms (hyperactivity, aggression, irritability, and attention problems) observed during exacerbations. In some publications in the literature, it is said that the diagnosis of PANDAS cannot be made in children diagnosed with ARF, and ARF is accepted as an exclusion criterion for PANDAS (1). Many publications emphasize the difficulties experienced in the differential diagnosis of these cases with SC (2). In SC, there are choreoathetoid movements accompanied by dysfunction, symptoms are expected to improve in 1-6 months, and neurological findings such as hypotonia, choreatic hand, milkmaid's flu, and pronator sign can be seen in cases. The course seen in our case is repetitive, there is neurologic hyperactivity, and vocal tics are accompanied by motor tics. Therefore, repetitive motor movements in the case were evaluated in favor of PANDAS. Rheumatic heart diseases, which are the most common cause of acquired heart diseases worldwide, cause significant morbidity and mortality. In the literature, rheumatic

carditis is very rare in cases with PANDAS. In a study in which 60 cases with PANDAS were examined, mild mitral regurgitation was observed in only one of the cases (3). It is important to evaluate cases suspected of PANDAS in terms of ARF and rheumatic carditis because ARF is common in developing countries such as Turkey, common microorganism (GAS) is involved in the etiology of both diseases, there are difficulties in differential diagnosis with SC and it is still controversial whether the presence of ARF precludes the diagnosis of PANDAS.

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### [Abstract:0048] [Obsessive-compulsive disorders (OCD)]

#### 0048 - Management of a severe OCD case in the day clinic

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**INTRODUCTION:** Guidelines recommend combination of serotonin reuptake inhibitors(SSRI) and cognitive behavioral therapy(CBT) for severe obsessive compulsive disorder(OCD).

In this case, it's aimed to discuss diagnosis and treatment process of an adolescent patient who followed-up in day clinic(DC), diagnosed severe OCD with comorbid skin picking disorder(SPD), hoarding disorder(HD), trichotillomania(TM) and major depressive disorder(MDD).

**CASE:** A 16-year-old female admitted to psychiatry with complaints of fear of contamination, counting, praying, peeling skin, collecting food packaging, pulling hair and unhappiness. She diagnosed OCD, and fluoxetine 40mg/day started. Since symptoms didn't decrease after 2-months, fluoxetine discontinued, sertraline 50mg/day started. After that aripiprazole 5mg/day added. Due to blurred vision side effect, aripiprazole discontinued. After the lack of improvement despite treatment and her suicide attempt, we decided to follow-up patient in DC. Structured CBT and combined pharmacotherapy(sertraline 200mg/day, risperidone 2mg/day, N-acetylcysteine(NAC) 1800mg/day) administered in DC. She stated symptoms decreased 85% and Yale Brown Obsessive Compulsive Scale reduced from 38 to 22 after 8-weeks combination treatment.

**CONCLUSION:** In pediatric OCD, comorbid disorders're common, up to 80%. Severe OCD cases're often correlated with comorbidity. This case's complicated as she diagnosed OCD, SPD, HD, TM, and MDD.

First-line treatment for severe OCD include CBT and SSRI combination. DC allows intensive, multimodal management for CBT administration and pharmacotherapy. 40–60% of patients don't respond to SSRI. In such cases, adding an antipsychotic can be beneficial. In this case,

she didn't benefit from fluoxetine. By the end of the 8-week sertraline and risperidone augmentation, symptoms decreased to manageable levels.

Studies suggest that glutamate dysfunction may contribute pathophysiology of OCD. After glutamate modulator-NAC supplementation, her symptoms improved significantly, without side effect.

As a result, importance of DC follow-up and CBT+SSRI combination in the treatment of severe pediatric OCD is remarkable. Our case showed that NAC is promising candidate for adjunct treatment for OCD.

**Keywords:** obsessive compulsive disorder, day clinic, combination treatment

[Abstract:0052] [Perinatal psychiatry]

### 0052 - Postpartum depression risk factors

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**BACKGROUND AND OBJECTIVE:** Antenatal mental illness refers to psychiatric disorders that are prevalent during pregnancy and as long as 1 year after delivery. The postpartum time-frame is debatable: most investigators use a period ranging from 4 weeks after delivery to 3 months after delivery. Perinatal disorders ranging from mild depression and anxiety, mania, to florid psychosis all fall under the rubric of perinatal mental illness. Additionally, disorders that were present before pregnancy, or recurring along with disorders that emerge during pregnancy or in the postpartum period, are all considered perinatal mental illnesses. In this study; we aimed to search the risk factors of women for postpartum depression.

**METHODS:** In our previous study published in 2016, one psychiatrist had interviewed 182 patients when they were pregnant face to face and evaluated them before the delivery [1]. We searched prevalence of psychiatric disorders in that previous study. After the delivery same psychiatrist re-called the patients by phone and evaluate them again for postpartum depression by Edinburgh Postpartum Depression Scale.

**RESULTS:** Out of 182 women 41 had postpartum depressive symptoms. There was no statistically significant difference between groups according to age, education level, employment, income, gravida, parity, delivery week, mode of delivery, weight of the baby, gender of the baby, complications during pregnancy or delivery, nursing status of the baby, chronic disease status, taking help from someone during pregnancy and after delivery for housework or baby care. Depression group had statistically significantly more unplanned pregnancies [15/41 (36,6%) vs 27/141 (19,1%) p: 0.023]. Depression during pregnancy was more prevalent among postpartum depression group [25/41 (%61) vs 9/141 (%6,4) p:0.000]. So depression during pregnancy is a risk factor for postpartum depression. Smoking during pregnancy is also a risk factor for postpartum depression. Both STAI tests was significantly impaired in depressive group also.

**CONCLUSIONS:** Pregnant women with anxiety and depression during pregnancy, who have unplanned pregnancies and who smoked during pregnancy are more prone to postpartum depression. Those patients might be checked for depression after the delivery.

**Keywords:** Pregnancy, Postpartum depression, Edinburgh Postpartum Depression Scale

**[Abstract:0064] [Schizophrenia and other psychotic disorders]**

**0064 - Eczematous eruption induced by long acting form of aripiprazole**

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**INTRODUCTION:** Dermatologic adverse effects have been reported with both first and second generation antipsychotics, with the prevalence of approximately 5%. Adverse skin reactions have rarely been reported with aripiprazole treatment. We present a case of drug eruption induced by aripiprazole long acting injection.

**CASE PRESENTATION:** B.D., a 25-year-old, male patient was hospitalized in psychiatry inpatient clinic, due to aggression, auditory hallucinations, paranoid and persecution delusions, with the diagnosis of schizophrenia according to DSM 5-TR. The patient had history of methamphetamine use for the last 10 years and did not have any other medical conditions. Olanzapine tablet 10mg/day was started and dose was increased to 20 mg/day in follow-up. At 7th day of treatment, oral aripiprazole 10 mg/day and aripiprazole long acting injection of 400 mg were administered. After the administration of injection in the second month, acute severe eczematous-edematous rash erupted in hours. The eczematous rash started with pruritus and was in spongiotic form that started at the upper extremities, rapidly progressing to chest and abdomen. After dermatology consultation, bilastine tablet 10 mg/day, methylprednisolone aseponat lotion, methylprednisolone tablet 32 mg/day have been started with the diagnosis of antipsychotic drug eruption. All antipsychotic drugs had been discontinued, however because of the long acting formulation of aripiprazole, the release of the drug into systemic circulation continued. Eczematous rash had progressed during the 4 weeks despite anti-histaminic and steroid treatment. All lesions had disappeared dramatically after 6 weeks of injection.

**CONCLUSION:** Eczematous drug eruptions are eczema-like spongiotic skin reactions that occur in response to systemically administered medications. Incidence of eczematous drug eruptions have been reported between 7% and 10% of all cutaneous drug reactions, but severe skin reactions are rare. Cutaneous drug eruptions classically begin in 7–14 days after initiation of the drug, and can persist for a few days, usually completely disappearing within 1 or 2 weeks after discontinuation of the drug. A case of morbiliform maculopapular skin rash have been reported to develop nine days after oral aripiprazole treatment, and completely disappear after four days of cessation of aripiprazole. In our case, the skin rash had spread under antihistaminic and steroid treatment during the 4 weeks. The lesions disappeared dramatically after 6 weeks of injection. Considering the duration of skin lesions, we suggested that the eczematous skin rashes had developed as an adverse effect of aripiprazole long acting injection. The absence of any new medication which can cause drug-induced skin reaction and the absence of any viral infections also support that the present symptoms might have developed due to treatment with aripiprazole.

**Keywords:** Aripiprazole, eczematous, eruption



### Lower Extremity



### Upper Extremity



**[Abstract:0065] [Schizophrenia and other psychotic disorders]**

**0065 - Hypokalemia with olanzapine at the therapeutic dose**

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**INTRODUCTION:** Olanzapine, a second generation antipsychotic with affinity to multiple receptors, has various adverse effects. Olanzapine has also been associated with electrolyte imbalances both in therapeutic and toxic doses. We present a case of hypokalemia after olanzapine use.

**CASE PRESENTATION:** I.A., a 50-year-old male patient was admitted to psychiatry outpatient clinic with auditory hallucinations and delusions persisting for 5 years. He had no history of another medical conditions, substance use disorders. On psychiatric examination, the patient had flat affect, disorganized associations, also paranoid and mystical delusions. Complete blood count, routine biochemistry test results were within normal ranges. Cranial MRI and EEG showed no abnormalities. The patient was diagnosed with schizophrenia according to DSM 5-TR, and olanzapine tablet 10 mg/day was started. After 4 weeks, olanzapine dose was increased to 15 mg/day. At follow up, the patient has suffered from anorexia and fatigue. In routine biochemistry tests, the plasma potassium level was 3.1 mmol/L. The patient had no other medical conditions that can cause hypokalemia such as vomiting, diarrhea or diuretic drug use. As the symptoms and serum test result of hypokalemia developed after the treatment with olanzapine, the drug was discontinued. Risperidone 4 mg/day was started. The plasma potassium level of the patient increased to 3.9 mmol/L after 3 weeks of cessation of olanzapine.

**CONCLUSION:** Hypokalemia is serum potassium concentrations lower than 3.5 mmol/L. Hypokalemia is characterized by muscle weakness, loss of orientation, paralytic ileus and QT prolongation. In literature, clozapine, quetiapine, risperidone, trifluoperazine, and olanzapine have been shown to cause hypokalemia. The underlying mechanism of hypokalemia with the use of antipsychotics is unclear. One possible mechanism is the catecholamine effect of the antipsychotics. A study showed that clozapine raises plasma adrenalin levels via blocking alpha 2 receptors. Higher catecholamine levels result in hypokalemia; olanzapine has also the same pharmacological effect on alpha 2 receptors. The absence of personal or family history of renal disease or diuretic use, normal serum potassium level after cessation of olanzapine support that the probable cause of hypokalemia was olanzapine. Hypokalemia is an uncommon adverse effect of antipsychotics. However, serum potassium levels should be detected before and during the use of olanzapine, in patients with high risk for developing hypokalemia, or in patients with the symptoms suggestive of hypokalemia.

**Keywords:** olanzapine, electrolyte imbalance, schizophrenia

**[Abstract:0068] [Psychopharmacology]**

**0068 - Mirtazapine-Associated urinary retention**

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**INTRODUCTION:** Mirtazapine is a well-known antidepressant with a serotonergic and noradrenergic mechanism of action and deemed safe which makes it one of the first-line treatments of depression in elderly patients. Despite the fact that mirtazapine is one of the safest antidepressants we have, it is likely to cause urinary retention in elderly male patients. In this case report we will represent a 69-year-old male patient who was diagnosed with urinary retention after the utilization of 15 mg mirtazapine for 1 week.

**CASE PRESENTATION:** This is the case of a 69-year-old male patient with a 1-year history of major depression. The patient was diagnosed with major depression 7 months ago and he started treatment with 10 mg escitalopram. After a few months, the dosage was upgraded to 20 mg/day and finally 300 mg/day pregabalin before bedtime and 2 mg/day of alprazolam (equally divided into four doses) was added to the treatment. When he came to the emergency room he was suffering from common body aches, loss of appetite, anhedonia, fear of death and passive suicidal thoughts. After his admission to our clinic, we administered duloxetine 30 mg/day and increased it up to 90 mg/day in one week. Also we stopped treatment with pregabalin and we added mirtazapine 15 mg/day before sleep. After the initiation of mirtazapine, the patient started to urinate hardly and sometimes painfully. After consultation with urology, treatment for urinary infection was administered but no improvement was noted. At the end of the first week of mirtazapine treatment, the patient described urinary retention. Foley catheterization was not applied as a result of occlusion. Finally, we applied suprapubic cystostomy and tamsulosin 0.4 mg/day was recommended to be added to the treatment. We decided to stop the treatment of mirtazapine.

**CONCLUSION:** Although urinary retention was reported rarely as a possible side effect of mirtazapine, elderly patients with undiagnosed prostate hypertrophy tend to be diagnosed with it. In the present case, since we administered tamsulosin immediately and stopped the treatment of mirtazapine at the same time, we could not have a chance to observe what exactly caused the remission of urinary retention. It is plausible that mirtazapine induced a putative occlusion by aggravating the BPH. In conclusion, we recommend that the patient's signs of prostatism should be reviewed before administering mirtazapine and lower doses should be administered initially.

**[Abstract:0080] [Psychopharmacology]**

**0080 - A Case of atrial flutter concurrent with aripiprazole injection: is rhythm disorder cause or consequence?**

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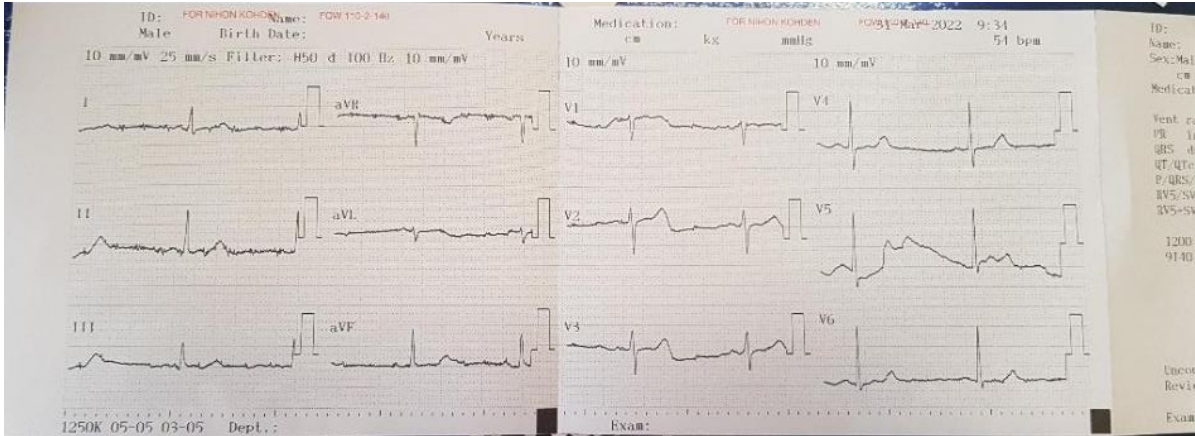
**INTRODUCTION:** Aripiprazole is a second generation antipsychotic agent that we use in the treatment of different mental pathologies, especially psychotic conditions. With its partial agonist effect on dopamine 2 receptors, it inhibits dopamine release at high dose dopamine concentrations, thus affecting positive symptoms. Conversely, if the dopamine concentration is low, it increases the release of dopamine, improving cognitive and negative mood. In addition to its blocking effect on 5ht2a receptors, its partial agonist effect on 5ht1a increases the preferability of the drug clinically and appears as an alternative in minimizing side effects such as weight gain and sedation.

The majority of patients who apply to the psychiatry outpatient clinic in daily practice are over the age of 65. Many internal diseases accompany this patient group, and organic pathologies often underlie some psychiatric symptoms. In our case, we will examine a case of atrial flutter in our female patient over 65 years of age, who presented with chest pain, while she was receiving aripiprazole monthly injection therapy.

**CASE PRESENTATION:** A 65-year-old female patient, who was followed up with a diagnosis of atypical psychosis for 5 years, had no active complaints. He applied to the polyclinic with a request for medication printing. It was observed that the patient had been administered monthly form as aripiprazole 400 mg injection for the last 6 months. In the mental state examination of the patient, it was observed that he did not have active psychopathology. No pathology was detected in her neurological examination. The patient's persecutory delusions and paranoid thoughts completely regressed; He also benefited from drug therapy. However, the patient complained of a feeling of tightness in the right lower quadrant during control. The patient, who was also diagnosed with concurrent asthma, stated that he had difficulty in climbing stairs. Electrocardiography was requested from the patient who had no known history of cardiological disease. The patient's ECG showed bradycardia, and his rhythm was consistent with atrial flutter. He was not sure whether it was drug-related or not, and the drug was planned to be tapered off.

**CONCLUSION:** Atypical antipsychotics are considered to have limited cardiovascular side effects, unlike conventional antipsychotics. Little is known about the cardiac toxicity of overdose of atypical antipsychotics. However, recent evidence points to potential cardiac arrhythmias during aripiprazole treatment. Prolonged qt interval and increased heart rate have been described during treatment with therapeutic doses of aripiprazole, and some reports have even demonstrated ventricular trigemina and related arrhythmias such as supraventricular tachycardia in patients treated with this drug. When the literature was reviewed, 2 case reports were seen and it was stated that it generally did not cause cardiac side effects and was safe.

**Keywords:** aripiprazole, atrial flutter, psychosis

**Atrial flutter on ECG****[Abstract:0085] [Eating disorders]****0085 - Central pontine myelinolysis as a complication of refeeding syndrome in a patient with anorexia nervosa**

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**INTRODUCTION:** Refeeding syndrome has been defined as a severe electrolyte and fluid shift associated with metabolic abnormalities in patients with malnutrition undergoing realimentation, whether it is done orally, enterally, or parenterally. In psychiatry, refeeding syndrome may occur in people with eating disorders and alcoholism. The consequences of a missed diagnosis of refeeding syndrome can be fatal; neurological complications include the Wernicke-Korsakov syndrome and central pontine myelinolysis. We wanted to report a case of central pontine myelinolysis in a 27-year-old patient with a 10-year history of anorexia nervosa (AN). We would like to highlight the necessity of a good treatment team consisting of internal medicine doctors, neurologists, psychiatrists, radiologists, dietitians and the key role of psychiatrists in managing these complicated cases.

**CASE PRESENTATION:** A 27-year-old woman, previously diagnosed with Anorexia nervosa before 10 years, admitted to our emergency service. She has been reported to loose 8 kg last one month and to loose consciousness at home. The initial liver enzymes were highly increased with ALT: 1432 AST:1085. Inbalanced electrolytes were detected. While the patient was being followed up in the gastroenterology clinic due to toxic/ischemic hepatitis, she was noted to develop refeeding syndrome. Electrolytes and general condition were stabilized. They reported that she tried to get involved patients' medication, believing that she is a doctor. She had also believed that she was a sultan. The gastroenterology team noted that they could not conduct the treatment in their service due to dezorganized behaviour. We admitted the patient to the psychiatry service after consultation. The salient symptoms were grandiose delusions, decline in cognitive functions, hypofrontality findings, disinhibited behaviors, urinary-fecal incontinence, insufficiency in memory functions during the service follow-up of the patient. The patient was consulted to neurology whether the neuropsychiatric symptoms arise from any neurological etiology or not. The intracranial screening with CT and DWI MR demonstrated that the findings were consistent with central pontine myelinolysis (CPM). The radiologists confirmed the diagnosis of CPM.

**CONCLUSION:** CPM as a rare manifestation of refeeding syndrome requires not only distinctive differential diagnosis but also careful management. We hope that the present case can shed light to prevent the possible challenges of the diagnosis of CPM, by providing these observations:

- 1- The disorganised behaviour occurring in CPM is likely to be ascribed to the regressive behaviour widely seen in AN.
2. Subtle changes in homeostasis can be easily overlooked in patients with acute neuropsychiatric symptoms admitted to the emergency service.
3. General medical screening plays an essential role in diagnosis of the cardinal etiology; even when there is compelling evidence in favor of a psychiatric disorder.

**Keywords:** Anorexia Nervosa, Delusions of Grandiosity, Central Pontine Myelinolysis, Refeeding Syndrome

**[Abstract:0087] [Obsessive-compulsive disorders (OCD)]**

**0087 - *In Vitro* (Imaginary Exposure) and *In vivo* (Home Visit) combining CBT for an adolescent with obsessive-compulsive disorder**

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**INTRODUCTION:** Obsessive-compulsive disorder (OCD) is a disease characterized by obsessions and/or compulsions and is seen in approximately 1% of children and adolescents. However, the main treatment strategy for OCD includes Selective Serotonin Reuptake Inhibitors (SSRIs) and Cognitive Behavioral Therapy (CBT), it is also possible to use mindfulness techniques and imaginary exposure modalities.

**CASE PRESENTATION:** 17 y/o boy came to the outpatient clinic in Cerrahpasa Medical Faculty, Department of Child and Adolescent Psychiatry with his mother. His complaint was feeling dirty and because of this, he started to wash his hands, feet, and face in a very detailed and ritualistic manner. He tried to keep himself away from any type of touching his family members at home and household stuffs. He thought that if he touches them, he will become the person who made them dirty. This dirtiness was going to be an obstacle to their routine daily prayers. According to him, this would eventually cause them to go to hell in the hereafter. His symptoms are restricted to the home. After a comprehensive evaluation, he is diagnosed with OCD and his CY-BOCS score was 28 and his CGI-severity of illness subscale was 6. He had no comorbidities according to the K-SADS-PL-DSM-5-T. Fluoxetine was prescribed and titrated up to 60 mg/day and weekly CBT was scheduled. After psychoeducation sessions and referral to religious consultation about his obsessional religious beliefs, imaginative exposure and response prevention sessions were made with the relieving effect of mindfulness techniques and muscle relaxation exercises. Since it was no longer possible to arouse anxiety in vitro settings, a home visit was made on the 21st session of CBT. At the 6-month follow-up time, his symptoms very much improved, his CY-BOCS score was decreased to 8 and his CGI-global improvement score was 2. He is now in the 9th month of his follow-up and no relapses occur up to now.

**CONCLUSION:** There is very limited data on home-based treatment of OCD in adolescents and studies included only refractory cases. We suggest that home-based in vivo interventions may be a treatment option not just for treatment-resistant cases, but also as an add-on treatment modality, especially for patients whose symptoms appear only in one setting (home).

**Keywords:** Obsessive-Compulsive Disorder, Cognitive Behavioral Therapy, home visit, adolescent

[Abstract:0088] [Disruptive behavior disorders]

### **Dissociative Identity Disorder in an Adolescent Patient: A case report**

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**INTRODUCTION:** Dissociative Identity Disorder (DID) is found at a rate of at least 1% in the community and 5.4% in psychiatry services (1,2). Symptomatology in dissociative disorders can be quite diverse. In particular, there are applications to the clinic with various findings such as depression, anxiety, visual and auditory hallucinations, and self-harming behavior. Dissociative disorders are highly associated with childhood mental traumas (3).

**CASE PRESENTATION:** A 14-year-old female patient applied to our clinic with her family. Her main complaint was seeing and hearing "bad beings" for 3 years. She first dreamed of 2 women and 1 man. She states that they have names, one of the women is her twin, the other one is similar to her mother, and the male one resembles her father. These beings started to be with her all the time because she could not protect herself against evil 3 days after the dream. These beings who used to protect her did not love her for 3 months and sometimes they took control and harmed her. She was able to call the people she saw in these sessions to the room whenever she wanted and transfer their conversations, send them back, and convey the answers they gave to the questions. In this process, the beings she mentioned were considered as alter personalities. At the same time, the patient could not remember some of the events she had experienced and how she had got to some places. In her mental state examination, she was conscious, showing her age, and her orientation was normal. Her speaking rate was slow, her attitude was willing to interview. Her mood was depressed and her affect was compatible. Her thought content was related to the people she saw and heard. Depersonalization and derealization were absent. There were no features on her resume and in her family history. No pathology was detected in routine laboratory tests and cranial MRI. Dissociative symptoms were measured by Adolescent Dissociative Experiences Scale and Child Dissociative Checklist. The patient was started on aripiprazole as 2x5 mg and Sertraline 50mg/day. When the patient did not respond adequately to treatment, the number of alters increased to 6 one month later. The patient was taken to psychotherapy with the diagnosis of DID according to DSM-V. Recognition of the alter system, handling of traumatic memories and integration were aimed in the psychotherapy process. In the 5th week of psychotherapy, the number of alters dropped to 3. The patient's follow-up and therapy continues with sertraline 50 mg/day and Aripiprazole 10 mg/day.

**CONCLUSION:** Dissociative disorder usually starts in childhood, but less than 8% between 12-19 years old are diagnosed. (4,5) It is important to establish the correct diagnosis in childhood, as it protects the child from trauma and provides easier progress in the treatment in childhood. (4,5). General treatment in the treatment process and psychotherapy principles apply. DKB-specific techniques need to be added. (2) What distinguishes DID therapy from other therapies is the alternation of therapy and the alter system. (2, 3) In our case, the therapy process continues by applying techniques related to DID.

**Keywords:** dissociation, adolescent, alter

**[Abstract:0090] [Mood disorders]**

**0090 - Management of lamotrigine associated skin rashes in an adolescent girl with autism**

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**INTRODUCTION:** Lamotrigine, an antiepileptic class drug, is an agent that can be used as a mood stabilizer in children and adolescents and skin rashes as a side effect are seen. Rarely, Stevens Johnson Syndrome may develop with skin rashes that may be mortal accompanied by systemic symptoms. In this paper, lamotrigine was started as a mood stabilizer in addition to the current olanzapine treatment in an 18 years old adolescent girl with autism spectrum disorder and bipolar disorder type 2. After the dose was increased, erythematous acneiform rash developed on the 10th day. Then, lamotrigine was discontinued and skin rashes regressed. Slowly titrating lamotrigine dose, noticing skin rashes on treatment and be able to distinguish benign and malign rash are so helpful for clinicians.

**CASE PRESENTATION:** An 18 years old adolescent girl who was followed up with the diagnosis of autism spectrum disorder and bipolar disorder was started on lamotrigine as a mood stabilizer in addition to the current olanzapine treatment. On the 10th day of treatment, erythematous acneiform skin rashes appeared on the face. After the dermatology consultation response, the drug was discontinued and the skin rashes regressed within 1 week. The fact that the skin rashes appeared in the head-neck region, were mildly painful, tended to coalesce, and resolved when the drug was discontinued, suggested that might be malign rash. The absence of systemic symptoms, intact blood values and no additional treatment is required, suggested that might be benign rash.

**CONCLUSION:** Further studies are needed on the use of lamotrigine in children and adolescents with autism spectrum disorder.

**Keywords:** Autism spectrum disorder, lamotrigine, skin rashes

**Keywords:** Lamotrigine, skin rashes, autism

**[Abstract:0093] [Attention deficit hyperactivity disorder (ADHD)]**

**0093 - Auditory-Focused distractor continuous performance test (ad-CPT): A New objective diagnostic tool developed for attention deficit hyperactivity disorder (ADHD)**

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**OBJECTIVES:** According to current studies, utilization of continuous performance tests (CPT) is used for helping to support or rule out a diagnosis of attention deficit hyperactivity disorder (ADHD) shows that CPTs will play a crucial role in the future of the academic literature. Therefore, the main purpose of this study is to develop an auditory-focused distractor CPT (ad-CPT). After developing the ad-CPT, this study also aims to test reliability and validation of it in the diagnosing ADHD in children between ages 6-12.

**METHODS:** Case group consists of 80 children and adolescents between ages 6-12. Likewise, control group is formed by participation of 80 volunteers who have similar sociodemographic features with the case group. To evaluate the severity of ADHD, Conners' Parent Rating Scale–Revised Short Form is given to both groups. Furthermore, ad-CPT is applied under the supervision of an expert. Participants who performed ad-CPT also took MOXO d-CPT or IVA-2 tests randomly. Artificial intelligence-based learning module was used in the development of ad-CPT in order to increase predictive acuity and sensitivity. ROC analysis is made to determine norm values of ad-CPT.

**RESULTS:** Sensitivity of ad-CPT is determined to be 91.25% while its selectivity is 83.75%. Furthermore, positive predictive value is 84.9%, negative predictive value is 90.5%. Also, the difference between the ad-CPT scores of the ADHD group and the control group is appeared to be statistically significant ( $p < 0.001$ ).

**CONCLUSIONS:** According to these results, ad-CPT is suggested as a valid objective tool which successfully distinguishes children and adolescents between ages 6-12 who were diagnosed with ADHD from typically developing children. In addition unlike other widely used CPTs, ad-CPT is the first objective tool which focuses on auditory targets and uses both visual and auditory distractors.

**Keywords:** ADHD, Continuous Performance Test, Artificial Intelligence, Children, Attention

**Keywords:** ADHD, Continuous Performance Test, Artificial Intelligence

[Abstract:0094] [Sleep disorders]

### **0094 - Hypersomnolence related with internal cerebral vein thrombosis and treated with modafinil: A Case report**

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**INTRODUCTION:** Hypersomnia is characterized by excessive sleepiness, either persistent or episodic which decreases the functioning and affects daily life adversely. The central disorders of hypersomnolence are a group of disorders containing narcolepsy types 1 and 2, idiopathic hypersomnia, Kleine–Levin syndrome, hypersomnia due to a medical disorder, hypersomnia due to medication or substance use, hypersomnia associated with a psychiatric disorder, and insufficient sleep syndrome. Several neurologic conditions including neurodegenerative, genetic, tumoral, vascular, or inflammatory insults to the central nervous system can lead to excessive sleep time and excessive daytime sleepiness<sup>2</sup>. The sleep–wake cycle is controlled by a widely distributed brain regions that includes interacting components of the brainstem, hypothalamus, basal ganglia, basal forebrain, and thalamus and by different neurotransmitter

systems. In this study, we examined the hypersomnolence occurring after internal cerebral vein thrombosis and its treatment in a 28-year-old female patient. Internal cerebral vein thrombosis can affect the thalamus, and possibly extend into the basal ganglia and the adjacent white matter. It manifests a wide range of symptoms from headache, nausea, and vomiting to focal neurologic deficits, hemiparesis, aphasia, seizures, coma, and death.

**CASE PRESENTATION:** A 28-year-old female patient was admitted to the neurology outpatient clinic with complaints of headache in the bilateral frontal regions that was persisting for 13 days. In the last 2 days, the complaint of blurred vision in the right eye had been accompanied. Her medical history included thoracic outlet syndrome, septorhinoplasty, HT and depression. The headache was very intense and was responding to painkillers for a short time. At the time of the first admission, neurological examination of the patient was normal, and she was scanned with cranial MRI with contrast, MR angiography and venography. No pathology was detected in cranial MR and angiography, however, venography examination revealed filling defects in both transfer sinuses. After that, she was further examined in terms of underlying medical conditions but nothing could be found. Antikoagulant treatment was started to receive and she was followed through three months by neurology department. At the sixth month control venography, filling defects were disappeared. The patient consulted to the psychiatry polyclinic with the complaint of excessive sleepiness. She was falling asleep during the daytime at different places and conditions including work, in public transport or while chatting with his friends for the last 3 months. Her Epworth sleepiness scale score was 21/24 at first appointment which is accordance with severe sleepiness. Any abnormality was not recognized in her mental status examination. In her psychiatric history, four years ago she had consulted psychiatry three times and taken medication( Escitalopram ) for 1.5 months due to depression. In her family history; there were not any people suffering from psychiatric disorders but her father. He had been diagnosed with delusional disorder. She had never used either alcohol or drug. She was smoking one pack per day. We diagnosed her with hypersomnia due to a medical disorder. We prescribed her modafinil in divided doses of 200mg at morning and evening. The patient's complaints was relieved at the control appointment which was fifteen days later. Her reapplied Epworth sleepiness scale score was 1/24. We saw the patient on the 30th and 45th days after the treatment for the control, and it was observed that the patient's well-being continued. Treatment was continued with modafinil 200 mg up to six months and ceased gradually at seventh month. Her symptoms did not recur again during her follow up.

**CONCLUSION:** It is shown that internal cerebral vein thrombosis affects the thalamus and hypothalamus, which play an active role in the sleep-wake cycle. Modafinil which is known to be an alpha 1 adrenergic agonist and a weak inhibitor of dopamine reuptake, is an FDA approved agent to treat Narcolepsy, Sleep Work Shift Disorder and Obstructive sleep apnea. In our case, hypersomnia developed due to a medical condition and benefited from Modafinil 200mg treatment. Patients who suffer from hypersomnia because of similar conditions could be treated with Modafinil after other organic situations have been ruled out.

**Keywords:** Hypersomnia; Internal Cerebral Vein Thrombosis; Modafinil

**[Abstract:0101] [Disruptive behavior disorders]**

**0101 - Prefrontal lobe syndrome in a patient with intracranial migration of a gravitational bullet: A Case report**

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**INTRODUCTION:** Gravitational bullets (stray bullets, falling bullets) are commonly seen in residential areas in war-torn countries such as Somalia. Penetrating gravitational bullet injuries may result in retained bullets or fragments. Here, we present a 10 years-old female subject who had an intracranial gravitational bullet injury, initially managed conservatively, and then surgically operated when the bullet was internally displaced and caused complications including agitation, mood changes, and personality changes.

**CASE PRESENTATION:** Patient was a 10 years-old female 5th grader student who was sleeping in her bed around 9 PM. The gravitational bullet came through the roof. When the mother came to her room, she saw that the patient was having convulsive seizures for about 5 minutes. When the mother noticed that the patient was still semi-conscious and not responding to her questions, she took her to the Al Jazeera Hospital. An X-ray of the head was taken and she was transported to the ER of the Somalia Turkish Hospital. At the admission, the patient was fully conscious with a Glasgow Coma Score of 15/15, and the neurological examination revealed non-remarkable findings. CT of the head was taken and then she was admitted to the ICU for 11 days, managed conservatively, and discharged home. No complications was observed until she started vomiting on the 18th day. When she came back to the hospital, the neurosurgery team decided to operate and remove the bullet. Following the discharge, she was conscious, talkative and fine for 4 days. Then she started being too aggressive, fighting, and hitting other students, and exhibited personality changes. She was a 5th grader student and her teachers noticed that she was having memorization problems, especially unable to retrieve what she studied at the school. She was found 10-20 km outside her home where she lived. She was able to remember her mother's phone number and someone made phone calls to her family to come and pick her up. She started schooling around 6 years old and she was a successful student per her teachers. In her Mini Mental State Examination: orientation was intact (9/10), registration was intact (3/3), attention and calculation was intact (5/5), recall was intact (3/3), and language was intact (9/9). Total score: 29/30. Interpretation: No cognitive impairment. Patient was prescribed Risperidone 0.5 mg oral solution at night time and responded to medication treatment well with full recovery from mood symptoms, behavioral problems, and neurocognitive impairments as part of frontal lobe syndrome.

**CONCLUSION:** Critical regions of the frontal lobes subserves aspects of personality and social behavior. In most reported cases bullet migration occur within 6 weeks of injury. The spontaneous migration of intracranial bullets is thought to be influenced by the specific gravity of the bullet, proximity to the CSF spaces, cerebral softening with loss of tissue resistance, and gravitational force. The present case provides evidence towards a better understanding of the personality changes due to disinhibition as part of frontal lobe parenchymal damage following an intracranial migration of a gravitational bullet.

**Keywords:** Gravitational bullet, migration of a bullet, personality changes, mental state exam, Somalia

[Abstract:0103] [Others]

**0103 - Absence epilepsy or sluggish cognitive tempo? A case report**

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**INTRODUCTION:** Sluggish Cognitive Tempo (SCT) refers to a set of cognitive and behavioural symptoms during childhood, including excessive daydreaming, distraction, concentration issues, and slow acting and thinking.

SCT is a research area that has yet to be officially included in the The Diagnostic and Statistical Manual of Mental Disorders - Fifth Edition (DSM-V) classification system. It was first mentioned in the mid-1980s when Attention Deficit Hyperactivity Disorder (ADHD) was divided into two subtypes: hyperactive and non-hyperactive. Although it was initially associated with the non-hyperactive ADHD subtype, SCT started to be considered a separate diagnostic group over time, and research on its diagnosis and treatment has been increasingly continuing.

Although there are no universal criteria when diagnosing SCT, detailed anamnesis and mental status examination are recommended. When detecting accompanying conditions, childhood epilepsy, especially absence epilepsy, negatively affects attention, and scholastic skills should be kept in mind and may have a similar clinical appearance to SCT.

**CASE PRESENTATION:** In this case report, the diagnosis and treatment process of a 9-year-old male patient who applied to pediatric neurology complaining of daydreaming and concentration loss during school lessons and daily activities will be explained. Neurological examination, biochemical blood parameters and EEG (electroencephalography) results of the patient were normal. According to the results of the psychiatric examination, family interview and psychometric tests performed by us, the diagnosis of SCT was considered in the patient. The patient, who was followed up by our outpatient clinic, was started on atomoxetine treatment and called for follow-up.

**CONCLUSION:** Many studies have been conducted on the coexistence of epilepsy and ADHD. Considering that SCT and ADHD also coexist frequently, the coexistence of SCT and epilepsy should not be surprising. The similar clinical features of absence epilepsy and SCT should be kept in mind by clinicians in the differential diagnosis.

Furthermore, this case shows the importance of cooperation and a multidisciplinary approach to child neurology and child psychiatry in clinical practice.

**Keywords:** Absence epilepsy, daydreams, sluggish cognitive tempo

**[Abstract:0110] [Psychosomatic medicine-Liaison psychiatry]**

**0110 - Risperidone induced cholestasis**

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**INTRODUCTION:** *Risperidone* is an atypical antipsychotic drug commonly used in psychiatric disorders that are considered safer than typical antipsychotics. Still, hepatic side effects could be observed under risperidone therapy. Although elevation in hepatic transaminases with risperidone therapy is well known, risperidone-induced cholestasis has acquired little attention in the papers. Nevertheless, there are several case reports in the literature. This case describes cholestasis associated with low-dose risperidone therapy.

**CASE PRESENTATION:** A 79-year-old female patient diagnosed with delusional parasitosis is recommended risperidone and titrated to 1.5 mg daily. After one year of risperidone 1.5 mg daily treatment, the patient was admitted to the internal medicine inpatient service for wound care. We were consulted to arrange treatment during follow-up. Due to the persistence of the delusions, the dose of risperidone was increased to 2.5 mg per day. Six days after the dose increased, the patient has consulted again due to hyperbilirubinemia (total bilirubin 2.56 mg/dL and conjugated bilirubin: 1.57 mg/dL). The patient was asymptomatic, and her ALT and AST levels were within the normal range. Thus, cessation of risperidone was recommended. Further investigations could not identify any other cause of cholestasis. After discontinuing risperidone treatment, the bilirubin level returned to normal. According to The Naranjo probability scale, risperidone is found to be a probable cause of cholestasis with a seven-point score. World Health Organization Collaborating Centre for International Drug Monitoring, the Uppsala Monitoring Centre (WHO-UMC), also demonstrates risperidone as a probable/likely cause.

**CONCLUSION:** This case recommends monitoring cholestatic parameters besides liver function enzymes baseline and during the first weeks of risperidone treatment or dose increment. It is substantial to take extra precautions for elderly patients. Clinicians should inform patients regarding hepatic and cholestatic symptoms.

**Keywords:** Risperidone; hyperbilirubinemia; cholestasis

**[Abstract:0114] [Psychopharmacology]**

**0114 - A Case of lithium intoxication presenting with parkinsonism**

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**INTRODUCTION:** Parkinsonism is a clinical syndrome characterized by a combination of bradykinesia, resting tremor, rigidity and postural instability. The most common form of parkinsonism is Parkinson's disease, a chronic, progressive disease caused by degeneration of dopaminergic neurons in the brain, with clinical signs of asymmetric parkinsonism and dramatic and sustained benefit from dopaminergic therapy. However, there are other conditions that need to be considered. It is very important to investigate parkinsonism and try to arrive at an accurate diagnosis, as treatment and the resulting responses vary greatly. In general, other

forms of parkinsonism respond poorly to antiparkinsonian drugs. Apart from Parkinson's disease, signs of parkinsonism can be seen in neurodegenerative disorders such as dementia with Lewy bodies, corticobasal degeneration, multisystem atrophy, progressive supranuclear palsy, as well as secondary to drugs, toxins and conditions such as head trauma, cerebrovascular disease, central nervous system infections. Drug-induced parkinsonism is a common condition. Any drug that inhibits dopamine transmission can cause parkinsonism. Lithium may cause extrapyramidal system findings both at therapeutic levels and in acute and chronic intoxication. Here, we aimed to present a case of parkinsonism due to chronic toxicity in long-term lithium use.

**CASE PRESENTATION:** A 61-year-old woman was admitted to the neurology outpatient clinic with complaints of impaired consciousness, slowed movements, trembling and dullness of the hands, and inability to do her work. She was admitted to the neurology service to be examined for parkinsonism. Her medical history included diabetes mellitus, hypertension, hyperlipidemia, hypothyroidism and bipolar disorder. He was taking vildagliptin 50 mg, insulin lispro 2\*20, candesartan 16 mg, pitavastatin 2 mg, levothyroxine 200 mg, lithium 300 mg 3\*1 and quetiapine 200 mg 1\*1. While the patient was being examined for parkinsonism, he was consulted to us for the diagnosis of bipolar disorder and treatment adjustment due to the medications he was taking. According to the anamnesis obtained from the patient and his relatives, he had been having difficulty in maintaining sleep for 5-6 months. No decrease in the need for sleep was described. Visual hallucinations were added for the last 20 days. Recently, she had difficulty in doing her work. Functionality was negatively affected. Manic-hypomanic symptoms were not described. While the character of the patient's depressive episodes was usually irritability, this time it was stated that there was dulling and decreased reactivity. She started to have difficulty in putting words together. According to the anamnesis taken from her relatives, she had been forgetful for the last 1 month. While the family described this condition as forgetfulness, when the anamnesis was deepened, it was observed that this condition was characterized by fluctuations in consciousness and disruption in orientation in all three axes from time to time. He had been taking lithium 300 mg 3\*1 and ketiapine 100 mg 1\*1 for a long time, but due to the mentioned complaints, his family started to give ketiapine dose as 300 mg for the last 20 days. Her complaints increased when the dose of ketiapine was increased. 1.5 months ago, she had nausea and vomiting, which lasted for 10 days. During this period, she continued to take her medication regularly. She had been followed up for 25 years with a diagnosis of bipolar disorder. She was hospitalized in psychiatry 3 times in total. His last episode was 7 years ago. It was learned that he had been in remission and medication compliance for 7 years. Although the episodes were depressive or manic, he could not remember how many manic episodes he had. During the mental status examination, the patient appeared apathetic. Consciousness was clear, time orientation was impaired, and cooperation was limited. Spontaneous and voluntary attention was distracted. Affect was dull. Depressive theme was dominant in thought content. Visual hallucination was described. No delirium was detected. Behavior was psychomotor retardation. Sleep was disturbed and appetite was decreased. Insight was inadequate. Neurologic examination revealed bilateral arm rigidity and cogwheel findings, forward leaning posture, walking with a small step, movement and resting tremor, tremor in the hand like counting coins, bradykinesia, bradyimia, and decreased asociated movements. Cranial magnetic resonance imaging (MRI) revealed no pathology. Electroencephalography (EEG) revealed "high amplitude intermittent rhythmic wave discharges in the anterior hemispheres. It is recommended to rule out metabolic, toxic, infectious, structural events. It was interpreted as follows. Blood tests revealed no significant pathology except for a lithium level of 1.39 mmol/L (normal range: 0.6 - 1.2) and an eGFR (glomerular filtration rate) of 65.96 ml/min. Lithium intoxication clinic was considered in the patient. It was recommended to discontinue lithium, to evaluate for neurotoxicity, to continue

ketiapine 200 mg in the evening, to ensure adequate hydration, and to follow the recommendations of cardiology in terms of intoxication. During the follow-up of the patient, it was observed that parkinsonism symptoms regressed, orientation improved and apectin returned to normal within 2 weeks. The patient was discharged from the neurology service in good condition. After lithium treatment was discontinued, the patient's complaints completely improved and valproic acid 500 mg 1\*1 was started as a mood stabilizer. The patient is in remission in terms of bipolar disorder and continues regular outpatient clinic visits.

**CONCLUSION:** While our patient was being examined due to clouding of consciousness, disorientation and parkinsonism findings, it was thought that the patient might have intoxication considering that he was using lithium. The blood test showed that the lithium level was 1.39 mmol/L, which was above the upper limit. Although it was not at very high levels in terms of intoxication, neurologic findings were observed in the foreground due to chronic toxicity. Any condition that causes dehydration such as gastrointestinal losses, acute decompensated heart failure, cirrhosis, vomiting or diarrhea, fever, anorexia or infection can lead to lithium toxicity. There have also been reports of severe clinical toxicity despite therapeutic lithium concentrations. Treatment should therefore be based on clinical signs and not on drug levels alone. The general approach to any poisoned patient begins with assessment and stabilization of the airway, breathing and circulation. discontinuation of lithium, adequate hydration, cardiac monitoring, fluid-electrolyte monitoring and hemodialysis when necessary are recommended. If the serum lithium concentration is greater than 5 mEq/L, if the serum lithium concentration is 4 mEq/L but there is renal impairment (creatinine >2.0 mg/dl), if there is a decreased level of consciousness, seizure or life-threatening complication regardless of serum lithium concentration, if the serum lithium concentration is greater than 2.5 mEq/L (2.5 mmol/L), and if the patient shows signs of lithium toxicity (e.g. seizures, depressed mental status, depressed mental status), seizures, depressed mental status), in the presence of renal failure or other conditions limiting lithium excretion, or in the presence of a disease that would be exacerbated by aggressive intravenous hydration (e.g. decompensated heart failure), hemodialysis should be a priority (11). In some cases, neurological complications persist despite hemodialysis. Syndrome of irreversible lithium-associated neurotoxicity (SILENT) consists of prolonged neurologic and neuropsychiatric manifestations following lithium toxicity. Cerebellar dysfunction, extrapyramidal signs, brainstem dysfunction and dementia may develop as part of SILENT. In our case, after discontinuation of lithium and adequate hydration, the patient's complaints improved completely. Thus, the parkinsonism picture could be treated without the need for antiparkinsonian drugs. Since the therapeutic window of lithium is narrow, every patient who uses lithium and describes any side effect should be evaluated for intoxication, regardless of the lithium level, and caution should be exercised when using lithium, especially in elderly patients and patients with comorbidities (kidney disease, hypertension, diabetes, etc.). It is important for neurology and psychiatry physicians to consider lithium neurotoxicity in the presence of parkinsonism findings in patients using lithium.

[Abstract:0115] [Psychopharmacology]

### **0115 - Management of antipsychotic-induced hyperprolactinemia**

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**INTRODUCTION:** The use of antipsychotic agents has been associated with hyperprolactinemia. This abnormality in prolactin (PRL) level can affect the functioning of reproductive, endocrine and metabolic systems. Although first-generation antipsychotics in particular pose the greatest risk for hyperprolactinemia, second-generation antipsychotics, particularly risperidone and paliperidone, also frequently increase prolactin secretion. Here, a case of hyperprolactinemia was treated with aripiprazole is presented.

**CASE PRESENTATION:** 16 years old girl living with her family; she applied to emergency psychiatry unit with symptoms such as active suicidal thoughts, violent behavior towards her family and fears that she would be harmed by people. Based on the patient's current symptoms, clinical course and history; diagnosis of depression with psychotic features was made. After hospitalization, risperidone treatment was started and gradually increased to 3 mg/day. Quetiapine 50 mg/day treatment was arranged and gradually increased up to 600 mg/g in order to strengthen the treatment for depressive and psychotic symptoms. In the patient whose psychotic symptoms improved significantly with the current treatment, PRL was found to be 139.7 µg/L in the blood tests performed upon the galactorrhea. No organic pathology was observed after MRI of the pituitary with contrast. Aripiprazole 2.5mg/g was added, considering that there might be hyperprolactinemia secondary to antipsychotic treatment. Aripiprazole dose was gradually increased up to 7.5 mg with plasma PRL levels monitoring. Prolactin level decreased to the normal range in blood tests and her psychotic symptoms continued to improve.

**CONCLUSION:** Several studies have shown that partial agonists for dopamine receptors, can help to lower prolactin levels in patients with antipsychotic-induced hyperprolactinemia without the risk of worsening psychosis. Aripiprazol, which is a partial agonist antipsychotic for D2 receptors, may be preferred in cases of antipsychotic- induced hyperprolactinemia.

**Keywords:** Hyperprolactinemia, Aripiprazole, Galactorrhea

[Abstract:0117] [Impulse control disorders]

### 0117 - Obesity and suicide attempt after internet gaming disorder

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**INTRODUCTION:** The Internet has become a widely used communication tool today due to its features such as accessing information in a short time and providing fast communication. However, studies show that problematic internet use associated with psychiatric disorders. In this case, a patient who has gained about 60 kg in the last 3 years after internet gaming disorder and who was hospitalized after a suicide attempt developed on a depressive background is presented.

**CASE PRESENTATION:** 15 years old, 8th grade dropout male patient living with his family; He applied to the child and adolescent psychiatry outpatient clinic of our hospital with complaints such as active suicidal thoughts, violent behavior against his family and spending all his waking hours in front of the computer. Based on the patient's current symptoms, clinical course and history; The patient was diagnosed with internet gaming disorder, major depressive disorder, and conduct disorder because it was compatible with the accepted criteria. After the hospitalization, treatment with fluoxetine 20mg/day was started and continued at 40 mg/day. Considering its anti-obesity effect and mood-regulating effects, topiramate 25 mg/day treatment



was started and adjusted to 100 mg/day. It was observed that the patient, whose depressive symptoms regressed in the follow-up period and who developed a critical point of view towards suicide, lost approximately 12 kg in the service follow-ups.

**CONCLUSION:** This case report shows that psychiatric comorbidities can be seen in patients with Internet gaming disorder; Suicide ideas and attempts, which may be accompanied by depression comorbidity, are common in patients with internet gaming disorder; It makes us think that it should be evaluated in detail in terms of comorbid diagnoses and care should be taken in terms of suicide risk.

**Keywords:** internet gaming disorder, obesity, depression, suicide

[Abstract:0120] [Psychopharmacology]

**0120 - A Case of pitt-hopkins syndrome: psychopharmacological approach for anxiety, insomnia and agitation**

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**INTRODUCTION:** Pitt-Hopkins syndrome (PTHS) is a rare genetic disorder resulted from TCF4 gene mutations which is characterized by abnormal facial features, psychomotor delay and intellectual disability. PTHS is associated with additional features, such as breathing anomalies, seizures and constipation. Psychiatric conditions including self-aggression, anxiety are occasionally seen in these patients. We present the case report of a seven years old patient with Pitt-Hopkins syndrome who had intellectual disability and autism spectrum disorder along with hyperventilation spells, anxiety symptoms, sleep problems and agitation. We aim to discuss the psychopharmacological intervention options for this patient with Pitt Hopkins syndrome.

**CASE PRESENTATION:**The present case study reports on a 7-year-old female with diagnosis of Pitt-Hopkins Syndrome, Autism Spectrum Disorder (ASD), Intellectual Disability. She had deprivation of sleep, crying spells and agitation complaints after when she started to have hyperventilations-apneic spells 7 months ago. For anxiety symptoms and agitation, Risperidon, Fluoxetine and Clonazepam treatment was given by the neurologist which caused behavioral disinhibition, paroxysmal agitation and no benefit. After admission to our hospital, Aripiprazole and Hydroxyzine were prescribed for her anxiety and ASD related irritability. She showed a minimal improvement but hyperventilation attacks caused by sleep deprivation was still ongoing. Hydroxyzine was stopped and Quetiapine was given to eliminate sleep disturbance. Quetiapine initially was helpful. Her sleep period went up to eleven hours with this intervention. After this period, antidepressant treatment for the anxiety symptoms was discussed. Escitalopram was prescribed. She showed improvements in sleep, diminished hyperactivity, decreased frequency of abnormal breathing spells, as well as more rapid developmental progression.

**CONCLUSION:** Patients with genetic syndromes may have various psychiatric complaints. These cases should be evaluated individually since each of them have different medical conditions. Psychopharmacological interventions should be administered carefully and other medical issues need to be considered before administering a pharmaceutical agent.

**Keywords:** Pitt-Hopkins Syndrome, Genetic Syndrome, Autism Spectrum Disorder, Anxiety, Hyperventilation, Psychopharmacotherapy

[Abstract:0122] [Psychopharmacology]

**0122 - Alterations of appetite hormones in risperidone treated children and adolescents: Post hoc analysis of the SPACe study**

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**OBJECTIVE:** One of the most prescribed antipsychotic drugs among children and adolescents, risperidone is associated with a significant risk of weight gain [1]. While weight gain is multifactorial, metabolic and endocrine changes may play a key role in this process [2]. The primary aim of this study was to describe the alterations of appetite hormones that may affect weight gain over time in risperidone treated children and adolescents to identify possible variables of interest for future study.

**METHODS:** In the prospective multicenter cohort study: SPACe [3], blood samples of children with autism spectrum disorder were collected. At baseline, 12 weeks, and 24 weeks after the start of risperidone treatment, gastric inhibitory peptide (GIP), neuropeptide-Y (NPY), insulin, leptin, and bioleptin were assessed. Wilcoxon's two-tailed signed-rank test was used to evaluate the differences in the parameters at three-time points.

**RESULTS:** Seventeen patients (5 females) aged 6-17 years were included. We observed an elevation of plasma levels of leptin ( $p > 0.05$ ), bioleptin ( $p < 0.05$ ), and NPY ( $p > 0.1$ ) in the first 12 weeks of risperidone treatment. The rise was followed by a decrease. Moreover, HOMA-IR and insulin plasma concentrations increased between the baseline, 12<sup>th</sup> week ( $p < 0.05$ ), and 24<sup>th</sup> week ( $p > 0.1$ ). The GIP levels showed an opposite trend ( $p > 0.1$ ).

**DISCUSSION:** In this preliminary study we have observed increasing trends in the serum levels of leptin, bioleptin, NPY, HOMA-IR, and insulin, over the first 12 weeks of risperidone treatment. Additionally, a decline in the GIP plasma concentration was found. In the same period, elevation of the risperidone plasma level and the BMI-z were observed. Despite our limited sample size, these observed trends might indicate that the levels of appetite hormones correlates with plasma risperidone level and weight gain. These findings will be further investigated in a follow-up study.

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**[Abstract:0123] [Disruptive behavior disorders]**

**0123 - A 6-Year-Old boy who is a victim of incest: The Role of psychodynamic play therapy**

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**INTRODUCTION:** Child sexual abuse can be considered an activity aimed at providing sexual pleasure, stimulation, or gratification to an adult, who uses a child for this purpose, taking advantage of their dominant position. In this article, we present a case who was sexually abused by her father and recovered with psychodynamic play therapy. Written informed consent was obtained from the patient's legally authorized representative.

**CASE PRESENTATION:** a 6-year-old boy applied to our clinic with complaints of sexualizing behaviors such as kissing her mother by putting her tongue in her mouth and rubbing behaviors, irritability, startle at loud sounds, and enuresis. It was learned that these complaints started at the age of 5 when the parents were in the process of divorce and the child stayed with his father. Judicial proceedings continue. After the history taken from the family-child interview, and a single interview with the child, it was decided to follow the patient with psychodynamic play therapy once a week. Psychiatric comorbid diseases were screened. The patient was seen within the framework of psychodynamic play therapy once a week for 1.5 years and was followed up with monthly supervision. His sexualizing behavior, enuresis, and startle with sound disappeared. He continues more harmoniously in school and friend relations. While his Clinical Global Impressions Severity Scale (CGI-S) score decreased from 5 to 3, and his Clinical Global Impression Improvement Scale (CGI-I) score was 2.

**CONCLUSION:** Play is seen as the primary way for younger children to communicate their unconscious conflicts. With psychodynamic play therapy, the oral, anal, oedipal period and internal conflicts of the child in the developmental stages can be handled in the context of transference and countertransference. Through play therapy, they become able to express their internal conflicts at a more developmentally mature level and this is thought to be curative.

**Keywords:** play therapy, children, sexual abuse

**[Abstract:0133] [Psychopharmacology]**

**0133 - Early side effects after COVID-19 vaccine in children and adolescents with psychiatric disorders**

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**OBJECTIVE:** Vaccines for COVID-19 have reduced the severity of the infection and prevented deaths. During the beginning of the vaccinations, the parents of antipsychotic-using children begin to ask if the vaccine was safe for their children. Thus, we aimed to investigate if the side effects of the COVID-19 vaccine in adolescents with a psychiatric disorder that have to use antipsychotics are different from those of healthy peers.

**Methods:**

We prospectively followed up the post-vaccine short term side effects of 88 patients aged 12-18 years old, followed up in the child and adolescent psychiatry clinic for at least 3 months, and compared them to 88 age and gender-matched healthy controls.

**RESULTS:** Of the patients, 80 (%) of them were vaccinated with BNT162b2 as the healthy control group, the rest were with CoronaVac. 76 Of the patients were vaccinated with second, 21 were with third doses. This was 83 second doses, 26 third doses for controls. 45.4% of the patient group was using antipsychotics.

Patients who described side effects on the fourth day were examined in the clinic and the examination was repeated on the seventh day. The most frequently reported reaction after the first Biotech dose in the first four days in the patients' group was local pain (58.8%), fatigue (16.3%), redness (12.5%), and headache (11.3%) and after the first Sinovac dose in patients were local pain (75.0%), redness (25.0%), fatigue (25.0%) and there was no significant difference from the control group. There were no patients nor controls stating any side effects that still exist at day 7 after every 3 doses. When the vaccines' side effects are analyzed through the patients with and without antipsychotic use, there was no statistical difference between the groups.

**DISCUSSION:** These results show that vaccines examined in this study are safe in the short term for the antipsychotic-using adolescents.

**Keywords:** SARS-CoV-2, COVID-19, vaccine, psychiatric disorders, antipsychotics

[Abstract:0144] [Schizophrenia and other psychotic disorders]

### 0144 - Causal or incidental co-occurrence in adolescence; Occipital bending and psychosis

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Childhood onset psychotic symptoms may vary from developmentally appropriate, non-pathologic signs to symptoms of psychiatric disorders such as schizophrenia and mood disorders. Accurate diagnosis is essential. An appropriate evaluation of psychotic symptoms not only depends on psychiatric but also medical conditions. Meanwhile some of the individuals may have both structural brain changes and psychosis as well. In this case report, we reported 12 year old girl presented with psychotic and mood symptoms accompanying occipital bending in MR.

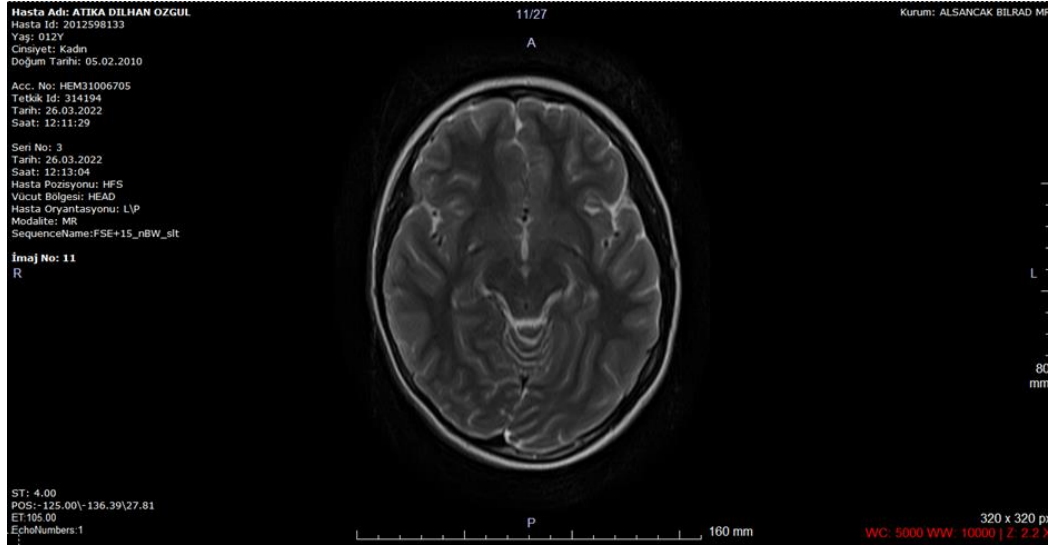
**CASE:** A 12 year old girl was brought to the outpatient clinic with complaints of seeing and hearing things for the last 3 years. Deeper history revealed accompanying unhappiness, lack of energy, social withdrawal and academic decline for the last 4 year. She described her visual hallucination as 'An alien like girl with yellow hair in a black dress threatening her with a knife' She has commanding auditory hallucinations also threaten her and her family. A detailed physical and neurological examination revealed no pathology. EEG was normal. In MRI the

occipital lobe is curved posteriorly to the right (occipital bending) were detected. She was diagnosed as occipital bending-related psychotic disorder and started medication.

**DISCUSSION:** A greater prevalence of occipital bending has been reported in major depressive disorder, bipolar disorder and schizophrenia in comparison to healthy adults. These findings may suggest a structural anomaly relating to brain development, however it is unclear whether it is causal or incidental relationship between psychosis and OB in adolescence. Further prospective studies evaluating OB in adolescence will help to clarify this issue.

**Keywords:** Occipital bending, Psychosis, Neurological symptom

## Occipital bending



*The occipital lobe is curved posteriorly to the right*

[Abstract:0152] [Addiction Psychiatry]

### 0152 - Angel's trumpet as an addictive substance: Case report and literature review

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**INTRODUCTION:** Brugmansia is an ornamental plant, commonly known as "pipe grass" or "Angel's Trumpet". It is known that this herb can cause anticholinergic crisis, acute psychotic symptoms and delirium as a result of voluntary or involuntary ingestion. Although there are studies showing its potential to be used as a psychoactive substance in recent years, this herb is not well known by clinicians for its addictive properties.

**CASE PRESENTATION:** A 34-year-old male patient was admitted to the psychiatry service with complaints of auditory and visual hallucinations. He had a history of addiction to different substances such as amphetamine and cannabis for fifteen years. He was diagnosed with schizophrenia six years ago. He had been taking buprenorphine/naloxone 12/3 mg, paliperidone 6 mg, bupropion 300 mg. **It was learned that the patient had secretly started using the pipe flower for two years due to being unable to access other substances.** He had usually ingested Brugmansia by chewing the leaves of the plant in the summer and making tea in the winter. There were no ongoing psychotic findings. He was in remission for schizophrenia. It was considered that psychotic symptoms appeared for a short time due to the

effect of the substance. Written consent was obtained from the patient for publication of information in scientific presentations.

**CONCLUSION:** The lack of legislation for Brugmansia unlike other psychoactive substances and cannot be detected in urine drug test makes this plant an important alternative for drug addicted patients. As a result, it should be remembered that patients with substance addiction may use this flower in different ways.

**Keywords:** Brugmansia, psychoactive substance, schizophrenia

[Abstract:0153] [Autism Spectrum Disorders]

**0153 - DHEA-S may be related to male bias in ASD?**

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**OBJECTIVE:** Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by difficulty in social communication, limited interests, and the presence of repetitive behaviors. ASD is more common in male than female. It is thought that one of the factors leading to male bias may be the androgen effect. In this study, it is aimed to compare DHEA-S (Dihydroepiandrosterone sulfate) levels with the normal population in boys with ASD.

**METHOD:** The study was conducted between 15 February - 28 June 2021 in Istanbul University Istanbul Faculty of Medicine. Total 84 participants (ASD n=42, neurotypical controls n=42) aged 6-10 years were included. ASD diagnosis and severity were established using K-SADS PL and the Childhood Autism Rating Scale (CARS). In addition, the Strengths and Difficulties Questionnaire (SDQ) and Aberrant Behavior Checklist (ABC) were used to evaluate the clinical characteristics of the case group. Serum samples were evaluated by ELISA method and DHEA-S levels were measured.

**RESULTS:** Serum DHEA-S levels were found to be significantly lower in the case group compared to the control group (p=0.007). There was no correlation between severity of ASD measured by CARS and DHEA-S levels (p=0.100). Also, SDQ and ABC total scores and subscores were not related with DHEA-S levels.

**CONCLUSION:** The results of this study suggest that the difference in DHEA-S levels may contribute to etiology of ASD and male bias in ASD. Conducting more studies with larger samples would be beneficial for understanding the etiology of male bias in ASD.

**Keywords:** autism spectrum disorder, DHEA-S, male bias, CARS

**[Abstract:0170] [Mood disorders]**

**0170 - SARS-CoV-2/COVID-19 associated pediatric acute-onset neuropsychiatric syndrome: A Case report of female twin adolescents**

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**INTRODUCTION:** “Pediatric acute-onset neuropsychiatric syndrome”, or PANS, is a rare syndrome characterized by an acute onset obsessive-compulsive disorder (OCD), and/or severely restricted food intake accompanied by a variety of neuropsychiatric symptoms. To our knowledge, this is the first case report of twin adolescents with COVID-19 associated PANS.

**CASE PRESENTATION:** Dizygotic twin sisters in late teens, with abrupt and acute onset of severely restrictive food intake, weight loss, OCD, anxiety with intermittent auditory and visual hallucinations, depression, attention deficit, and sleep disturbances, simultaneously accompanied by milder neurologic symptoms such as hand tremor, tinnitus, dizziness, headache, and weakness of proximal muscles, were applied to child and adolescent psychiatry clinic. The only relevant agent underlying those neuropsychiatric and somatic complaints was detected as COVID-19, and it was validated with laboratory testing, such as positive IgG titers of SARS-CoV-2, as well as negative biomarkers for other possible bacterial or viral agents. Generalized epileptic anomaly and a vermian/foial atrophy in the cerebellum were detected in further evaluations. Treatment options consisted of psychotropic agents, antibiotics, antiepileptic, and intravenous immunoglobulin transfusion finely treated the neuropsychiatric symptoms.

**CONCLUSION:** This case report aims to recognize the first cases of SARS-CoV-2/COVID-19 associated PANS, who are dizygotic twin female adolescents, and to contribute to the literature concerning neuropsychiatric consequences of SARS-CoV-2 infection in the pediatric population. Clinicians should consider SARS-CoV-2 as a potential agent, when a child presents with abrupt onset, dramatic neuropsychiatric symptoms also consisting of PANS, even in asymptomatic patients or with mild respiratory symptoms.

**Keywords:** Pediatric Acute-onset Neuropsychiatric Syndrome, COVID-19, SARS-CoV-2

**[Abstract:0171] [Neuroscience: Neuroimaging-Genetic Biomarkers]**

**0171 - Myasthenia gravis and periventricular nodular heterotopia in neuropsychiatric frame; Case report of a female adolescent**

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**INTRODUCTION:** The coincidence of myasthenia gravis (MG) and psychiatric symptoms/disorders should not be ignored given the high rates of comorbidity and reciprocal influence of conditions on either clinical course or treatment. To the best of our knowledge, this is the first pediatric case report of a Juvenile MG (JMG) with thymus hyperplasia, a unilateral periventricular nodular heterotrophy (PNH) at lateral ventricle quite closed to basal ganglia and

severe psychiatric comorbidity complex including affective and neurodevelopmental disorders such as major depression, anxiety, and tic disorders, as well as a suspicious background of ADHD and learning disabilities.

**CASE PRESENTATION:** A girl in her late adolescence applied with severely increasing depressive and anxiety symptoms over the past 2 months, on a chronic and complex motor tic disorder background for 2 years. Also, severe somatic and vegetative symptoms such as loss of appetite, restrictive food intake, weight loss (from 55 kg to 43 kg in 2 months, BMI: 15.9 kg/m<sup>2</sup>), cachexia, recurrent tension-type headaches with the analgesic response, feebleness, lassitude, and sleep disturbances. Her tic symptoms had been clonic, plural, complex (motor and vocal tics), and sequentially wandering around mimic muscles with the sensory phenomenon. A jaw tremor with difficulty in speaking (a nasone and shaky talk), fear of inability to swallow, facial hypomimic, general muscle weakness (also weakness raising eyebrows), and fatigue increasing gradually during the day, and astonishing, transient ptosis of right eyelid were detected in longitudinal psychiatric examinations. There is myotonia in repeating openings of the hands (without tongue involvement). Subsequently, the diagnosis of JMG and concomitant neuropsychiatric conditions (possibly a PANS) such as chronic complex primary tic disorder, major depression, and generalized anxiety disorders were recognized, which were accompanied by thymus hyperplasia and PNH. The treatment was started as pyridostigmine (240 mg/day), prednisone (2 mg/day), and psychotropic drugs including fluoxetine (40 mg/day) and aripiprazole (15 mg/day). The antidepressant therapy needed to be changed twice within 3 years due to fluctuation and insufficiency in the patient's response to treatments that fluoxetine was first placed by sertraline, and sertraline was then placed by venlafaxine. The best improvement of depressive symptoms was observed with venlafaxine (SNRI). The patient was weekly followed up, and significant improvement in psychiatric symptoms and also in social functionality after 2 months of therapy was observed. After invasive and surgical interventions including IVIG and thymectomy, the depressive symptoms and social functionality of the patients have been fluctuating for 3 years, possibly due to the psychosocial burdens of having a chronic illness.

**CONCLUSION:** This female adolescent with JMG, who was followed closely for 3 years with a multidisciplinary treatment approach, may contribute to the literature as a beneficial example for guiding the further examination and management of JMG with severe, complex psychiatric comorbidities, and for demonstrating the positive effects of intravenous immunoglobulin treatment and thymectomy along with proper psychotropic use on both psychiatric and neurological course, as well as for providing insights to clinicians about the presence of possible CNS-malformations.

**Keywords:** Juvenile Myasthenia Gravis, periventricular nodular heterotopia, psychiatric comorbidity

[Abstract:0172] [Others]

### **0172 - Turkish adaptation of the executive functions and occupational routines scale (EFORTS) and its validity and reliability in children with dyslexia**

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**OBJECTIVE:** Executive Function (EF) deficits have been reported in such neurodevelopmental disorders as attention-deficit hyperactivity disorder, speech/language disorders, conduct disorders, and autism spectrum disorder as well as specific learning disabilities (e.g., dyslexia, dyscalculia, and dyspraxia). Nearly all children diagnosed with these neurodevelopmental disorders show difficulty in some neuropsychological functions relevant to EF, including planning, organizing, goal-directed behavior, or creative and socially constructive behavior in daily occupational routines. Therefore evaluating both EF and EF-related daily routines management in children with these neurodevelopmental disorders, or, alternatively, using a tool that combines both domains, is critical for supporting diagnosis and for effective clinical follow-up. Given reports of EF deficits among children with dyslexia, these children predictably experience challenges in their daily responsibilities, often leading them to move through tasks more slowly, forget where they put their belongings and engage in disputes with members of the family. Assessment instruments measuring each construct of EF separately are available in previous literature. However, there was no instrument that simultaneously evaluates the daily routine management skills and the possible contribution of EF to them. In this direction, the Executive Functions and Occupational Routines Scale (EFORTS) was developed for children aged 6-12 years of age to measure the possible contribution of EF to their ability to complete and manage their personal daily routines. Unlike assessment tools that measure varied aspects of EF, the EFORTS evaluated EF indirectly by focusing on the child's ability to manage morning-evening routines, meal times, and leisure activities. The purpose of the present study was to provide a Turkish cultural adaptation of EFORTS (EFORTS-T) and to investigate its psychometric quality in children with dyslexia.

**METHODS:** We culturally adapted the original English version of this instrument with internationally suggested methods. Participants included the mothers of either randomly selected children with dyslexia (study group, n=158) or age and sex-matched typically developing children (control group, n=167). These participants completed a demographic form, the EFORTS-T, and the Behavior Rating Inventory of Executive Function- Parent form (BRIEF-P).

**RESULTS:** For internal consistency, the alpha coefficient of the new instrument was excellent (.93), and it showed satisfactory test-retest reliability over a 14-day interval (.91). The criterion-related validity between the EFORTS-T and the BRIEF-P was moderate (.73). Fit indices of the model supported its factor structure.

**CONCLUSION:** The current study's findings validate the EFORTS-T as a reliable and valid tool for use in evaluating putative deficiencies in executive control during daily activities of school-aged children with dyslexia for Turkish respondents. The EFORTS-T can guide professionals and parents of children with dyslexia on how to use metacognitive strategies to assist children improve their independence in daily routines, by exhibiting the relationship between EF deficits and individual daily occupational challenges. Further studies are needed to apply this instrument to children of different age groups and psychiatric conditions.

**Keywords:** executive function, dyslexia, occupation, executive control, daily routines, BRIEF

**Keywords:** executive function, dyslexia, occupation, executive control, daily routines, BRIEF

**[Abstract:0173] [Specific learning disabilities]**

**0173 - The Effect of play and competition-based cognitive therapy on executive functions and occupational routines in children with dyslexia: Double randomised controlled trial**

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**OBJECTIVE:** Given a number of studies on the cognitive impairments of children with dyslexia, the literature revealed a smattering of extremely limited evidence on interventional practices of cognitive problems, which relatively focused on the conventional therapeutic interventions for enhancing scholastic skills. To overcome the limitations of previous studies regarding the contribution of suggested daily interventions for dyslexia to cognitive deficits and improve underlying executive functions and daily routines in an occupational context, we sought to examine the effects of a play- and competition-based cognitive rehabilitation intervention on executive functions and occupational routines in school-aged children with dyslexia, as well as to determine whether the intervention could acclimate dyslexic children to their occupational context. Furthermore, the investigation was guided by the following research questions: ‘Will dyslexic children who receive cognitive therapy (intervention group) from the pediatric unit exhibit greater improvements in visual perceptual skills, cognitive functions, executive functions, and occupational routines than the control group of age- and sex-matched dyslexic children who did not receive cognitive therapy?’ and ‘Will dyslexic children’s advances in these functions persist over the course of three months?’ Impacts of play and competition-based cognitive therapy (PC-CT) on executive function and occupational routines in children with dyslexia were investigated.

**METHODS:** In this double randomized controlled trial, 76 dyslexic children (7-12 years old) were randomly selected from a total of 160 dyslexic children and divided randomly into treatment (n=38) and control (n=38) groups. The intervention comprised of a one-hour session of cognitive therapy three days a week for ten weeks, while the controls were followed without therapy. Both groups were evaluated in terms of the cognitive skills with the ‘Test of Visual Perceptual Skills-3’ and ‘Dynamic Occupational Therapy Cognitive Assessment’, executive functions with ‘Behavior Rating Inventory of Executive Function’, and the occupational routine with the ‘Executive Functions and Occupational Routines Scale’, in consecutive three phases such as at baseline, at the end of therapy, and the third month of follow-up.

**RESULTS:** Both executive functions and occupational routines of the intervention group significantly differed from those of the controls. PC-CT was consequently a beneficial intervention, improving the executive functions and occupational routines of dyslexic children, which could be recommended as an evidence-based complementary therapy of dyslexia in schoolers.

**CONCLUSION:** Children with dyslexia underwent cognitive therapy to strengthen their cognitive and executive functions, as well as their occupational routines. A cognitive therapy, three times per week, for ten weeks is effective in improving of executive dysfunctions in dyslectic schoolers. Additionally, the improving effect persists into following three months. With these positive results, the next step is to clarify the impact of cognitive therapy on the

roles of reading and writing skills, academic achievement, and social participation in children with dyslexia.

**Keywords:** Dyslexia, Intervention, Cognitive therapy, Executive functions, Occupational routines.

**[Abstract:0178] [Anxiety disorders]**

**0178 - Can fluoxetine treatment be effective in a 6-year-old child with selective mutism with sensory processing disorder?**

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**INTRODUCTION:** Selective Mutism (SM) is a rarely seen childhood psychiatric disorder characterized by persistent failure to speak in specific contexts where speech is typically expected, despite speaking in other situations. Some children with SM may also have sensory processing disorder meaning that they have difficulty processing specific sensory information. They may be sensitive to sounds, lights, touch, taste and smells. In this case report, we present the case of a 6-year-old girl with SM affected by sensory processing disorder.

**CASE PRESENTATION:** The patient had not spoken to people with whom she was unfamiliar. Yet, she was able to speak with her parents, sibling and two peers without any problem. On her first visit to our clinic, the patient refused to speak to the psychiatrist except using two words: “Yes” and “No”. She had no known previous history of other psychiatric or chronic physical diseases neither her family had so.

She had an oversensitivity to sounds as well. She was quite afraid of loud noises such as hair dryers and horns.

Fluoxetine was started with appropriate dose increases and she tolerated Fluoxetine 30 mg with no adverse effects. In response to our treatment, her parents reported a rapid recovery within three weeks, with substantial improvements in all aspects of social skills. She started to talk to other children and make new friends. She also became able to express herself better when something bothered her. She began speaking with the psychiatrist and used two to three words long sentences. After eight weeks on medication, she began answering questions from people to whom she had never talked before. The sunlight which was bothering her strongly before the treatment became normal in time. In the same way, the sound of a hair dryer is not as unbearable as it used to be. We administered the Selective Mutism Questionnaire (SMQ) both before and after the treatment. Our results showed 15 points increase in the ratings of the scale from 18 to 33 points.

**DISCUSSION:** Sensory processing difficulties should be thoroughly examined in children diagnosed with SM. There is a need to consider the sensory abnormalities when planning interventions for children with SM. Consistent with studies showing that fluoxetine treatment is beneficial in SM, our patient showed marked improvement within a few weeks in both SM and sensory processing difficulties after fluoxetine treatment. Nevertheless, further research is needed to provide the best treatment options for children with SM with sensory processing disorder.

Written informed consent for the case report has been obtained from the parents.

**Keywords:** Fluoxetine, selective mutism, sensory processing disorder

[Abstract:0182] [Autism Spectrum Disorders]

**0182 - Comorbid depression treatment with fluoxetine in a 6-year-old boy with autism spectrum disorder**

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**INTRODUCTION:** Depression can be found in a significant proportion of autism spectrum disorder (ASD) cases. However; since depression in ASD can occur with atypical symptoms and may overlap with autism findings, it is hard to distinguish. In the literature, atypical antipsychotics are approved for behavioral impairments in such cases. Selective serotonin reuptake inhibitors (SSRIs) have shown to be effective in some studies; yet, larger multi-center studies have raised questions about the effectiveness of SSRIs.

Our case suggests that SSRIs might be beneficial in selected cases.

**CASE PRESENTATION:** This report presents a 6-year old boy who has been diagnosed with ASD at age of 4. He applied with complaints of behavioral impairments, sleep disturbances, and crying most of the day. According to history; after his mother's death, he gradually began to lose the abilities he had gained. They stated that he used to have a few sentences, but he stopped talking. Also; although he used to play appropriately with his toys, he started to break them. He could not adapt the special education.

He had been using risperidone 0.25 mg for 3 weeks at admission, with no benefit. We gradually increased the dose to 1.25 mg in 1,5 months. Hitting behaviors reduced, and he started to gain his sentences, but crying increased drastically and sleeping pattern was still disturbed. Appetite increased significantly. Considering his complaints started after his mother's death, we considered a diagnosis of depression and started 5mg of fluoxetine. He highly benefited from this treatment after 1 month and his crying and sleep disturbances resolved. His special education teacher stated that he can adapt easily now. After 3 months, his sister stated that his stereotypical movements also decreased. His follow-up continues with monthly visits.

**CONCLUSION:** Our case suggests that in children with ASD, the possibility of depression comorbidity and SSRI treatment should be kept in mind. More studies are needed to better recognize and treat depression symptoms in ASD.

Written informed consent was obtained from patient's parent.

**Keywords:** Autism Spectrum Disorder, depression, fluoxetine

**[Abstract:0184] [Autism Spectrum Disorders]**

**0184 - Maintenance electroconvulsive therapy for agitation in autism spectrum disorder**

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**INTRODUCTION:** In autism spectrum disorder, self-injurious behaviors (SIBs) are destructive symptoms that can cause dangerous injuries. Agitation may not always respond to psychopharmacological and behavioral interventions in these patients. There are reports improvement after maintenance electroconvulsive therapy (ECT) in pharmacotherapy-resistant cases.

**CASE PRESENTATION:** A 17-year-old male patient was diagnosed with Autism Spectrum Disorder (ASD) at the age of 2 and has been in special education for 15 years. He was largely nonverbal, communicating occasionally with one or two words. He did reasonably well until age 15, enjoying home and school life, until the start of the aggressive behaviors. Previous medication trials had included several antiepileptic agents, antipsychotics, stimulants and SSRIs, all with either no benefit or worsening of symptoms. He has been living a nursing home for 1 year, due to severe aggressive behaviors that carry a high risk for the caregiver. He applied to our child and adolescent psychiatry emergency psychiatry unit with complaints such as SIB and violent behavior towards others. The patient was hospitalized on to our clinic considering the risk of suicide and homicide. No pathological finding was detected in laboratory results, MRI and EEG examinations. It was planned to start ECT treatment again after 17 sessions of ECT were applied in another center before, after a significant improvement in her complaints for a while. After receiving 12 sessions of effective ECT in inpatient follow-ups, he was discharged after a significant improvement in his complaints. It was decided to continue weekly maintenance ECT treatment. He was followed up with weekly ECT sessions for the next 2 months, and his relatives were informed that his well-being continued. His follow-up and treatment has been continued.

**CONCLUSION:** This case report that maintenance ECT was successful in a patient diagnosed with ASD with chronic irritability. SIBs are destructive symptoms that can lead to dangerous consequences. The prevalence of SIB in children and adolescents with ASD is reported to be between 30% and 40%. Pharmacological and behavioral interventions can be used to treat recurrent SIBs in ASD. However, given the extrapyramidal symptoms, cardio-metabolic and endocrine side effects such as hyperprolactinemia, recent research has focused on the efficacy of ECT in agitation as an alternative. It is known that many psychiatrists feel an exaggerated sense of danger in using ECT in children and adolescents. However, ECT has been repeatedly shown to be a well-tolerated treatment with minimal risk in both children and adults. There have been reports of mild transient side effects, such as headache, associated with ECT in children and adolescents. It should be kept in mind that ECT may be a fast and well tolerated good treatment option for ASD cases with treatment-resistant aggression.

**Keywords:** Autism Spectrum Disorder, Electroconvulsive Therapy, agitation, self-injurious behavior

**[Abstract:0185] [Schizophrenia and other psychotic disorders]**

**0185 - Parietal lobe atrophy in very late-onset schizophrenia**

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**INTRODUCTION:** The differential diagnosis of very late-onset schizophrenia and frontotemporal dementia might be difficult as there is an overlap of symptoms such as; disturbances in attention, cognition, personality, behaviour, and social functioning. In this report, we aimed to present a patient who had been admitted to our clinic with the aim of making the differential diagnosis between very late-onset schizophrenia or frontotemporal dementia; and had parietal atrophy in his whole brain MRI scan. Symptoms related to parietal lobe atrophy are expected to be; visuo-spatial deficits, apraxia, problems with understanding spoken and/or written language which were not present in this case. Parietal lobe atrophy is commonly seen in dementia, but abnormal white matter integrity of the left parietal lobe had also been reported in some cases of late-onset schizophrenia.

**CASE PRESENTATION:** Mr. Ç., a 71 year old man was admitted by the relatives to our inpatient clinic from the E.R. after cursing and attacking his brother-in-law. His other complaints were sleep disturbances, delusions of jealousy about his wife, claiming that he is the president and he is “the chosen one” and can talk to angels. He was also trying to escape from home. These complaints had been present for about a year and a half. He had no prior psychiatric history and no other known medical comorbidities. In his family history; his son was diagnosed with schizophrenia 17 years ago. In the E.R. his brain CT scan and brain diffusion MRI scans were performed and no acute pathology was detected. When he was first admitted, he was very agitated and hostile. His orientation was intact for time, location and people. He had delusions of jealousy and grandiosity. We performed a mini-mental test and his score was 25. His blood tests were in normal limits and Olanzapine 10 mg/daily was started as his treatment. For the differential diagnosis of FTD, we performed a whole brain MRI scan and parietal atrophy was detected inconsistent with his age. Although the MRI scan was performed with the aim of making the differential diagnosis between very late-onset schizophrenia and frontotemporal dementia, no atrophy was seen in the frontal or temporal regions.

**CONCLUSION:** In behavioural variant frontotemporal dementia, in early stages; parietal lobe may be affected instead of cortical frontal and temporal regions. It is reported that parietal atrophy may also occur in late-onset schizophrenia patients. The differential diagnosis of these cases might be difficult and may need further investigation. In this report, the diagnosis of very late-onset schizophrenia is more probable regarding the clinical course of the patient. The current diagnosis might change in the follow-up period.

**Keywords:** Parietal lobe atrophy, Very late onset schizophrenia, Frontotemporal dementia

**[Abstract:0190] [Psychopharmacology]**

**0190 - Cabergoline-Induced manic episode with psychotic feature in an adolescent case**

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**INTRODUCTION:** Dopamine agonists are commonly used in the treatment of hyperprolactinemia. Cabergoline is a selective agonist of long- half life D2 Dopamine receptors used in the treatment of hyperprolactinoma. When the literature was examined, no case of cabergoline-induced mania was found in adolescents. This is the first reported adolescent case with prolactinoma and cabergoline-induced first manic episode.

**CASE PRESENTATION:** A 16-year-old female patient was admitted to the emergency psychiatry center of our institution due to irritability, increased amount of speech, grandiose and persecution delusions, auditory hallucinations that started 1 month ago. She was admitted to our clinic with the prediagnosis of manic episode with psychotic features. No psychoactive substance was detected in toxicology. It was learned that there was no known history of psychiatric illness in the family. In the patient's history, cabergoline 1 mg/g was used for the treatment of prolactinoma for 1 year. Prolactin level was found to be 67ng/mL in the laboratory. Neuroradiological examination of the patient was performed, and a lesion consistent with a 6 mm adenoma was detected in the left pituitary gland. Cabergoline-induced mania was considered in pediatric neurology and endocrinology consultations. The patient's treatment was adjusted as olanzapine 30 mg/day and lithium 1200 mg/day. The patient whose prolactin level increased to 101ng/mL was started on aripiprazole 15 mg for D2 partial agonism and treatment enhancement. The patient, whose psychotic picture improved significantly with the current treatment and Young's mania score decreased from 53 to 17, was discharged with a picture of remission.

**CONCLUSION:** In this case report, the patient's family history and her history were unremarkable, and the temporally related psychotic symptoms that started after cabergoline use suggested that he had a cabergoline-induced manic episode. Cabergoline may induce mania in susceptible adolescents, so it should be used as cautiously as other dopaminergic agonists in susceptible individuals.

**Keywords:** cabergoline, mania, prolactinoma

**[Abstract:0199] [Psychopharmacology]**

**0199 - The lithium use during covid infection by pediatric population: case series**

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**INTRODUCTION:** Bipolar disorder is a mood disorder that usually starts in adolescence, progresses with episodes and can be confused with various diseases, especially due to irritability in children. Also, Schizoaffective Disorder is diagnosed by the accompanying symptoms of

schizophrenia and mood disorders. In this report two pediatric cases who were hospitalized with the diagnosis of acute manic episode of Bipolar Disorder (BD) and psychotic episode of Schizoaffective Disorder, both of whom had lithium use, and who had COVID-19 infection during the acute treatment period, are presented.

**CASE PRESENTATION:** A 15-year-old male patient was admitted to our inpatient service with complaints of rapid speech, increased energy level, increased goal-directed religious and sexual activity and lack of sleep for the last 2 weeks. The case met the diagnosis of bipolar disorder and risperidone 1 mg/day and lithium 600 mg/day treatment was initiated. On the fifth day of the hospitalization, his COVID-19 PCR test was positive. In blood tests CRP level was 22 mg/L and leukocyte count was  $7.9 \times 10^3/\mu\text{l}$ . PCR test turned negative on the seventh day control. In the laboratory tests, which was performed a week later, CRP level decreased to 6 mg/L and the leukocyte count increased to  $11,2 \times 10^3/\mu\text{l}$ . The physical symptoms of COVID-19 were disappeared. Our second case, a 14-year-10-month-old female patient was admitted to our inpatient service with the complaints of disorganized behavior as mumbling in public, wandering without purpose, laughing in the absence of an appropriate stimulus, delusions and derealization for the last 2 years. This was the third hospitalization of the patient with Schizoaffective Disorder. Due to history of several antipsychotic drug usage, clozapine was added to her current lithium 900 mg/day treatment, which she had been receiving for 11 months. On the tenth day of hospitalization the PCR test resulted as positive. In blood tests, CRP level was 24 mg/L and leukocyte count was  $8.12 \times 10^3/\mu\text{l}$ . The PCR result turned negative in the repeated PCR tests at the seventh day. A week later, CRP level decreased to 5.40 mg/L and the leukocyte count increased to  $11.83 \times 10^3/\mu\text{l}$ .

**CONCLUSION:** The common feature of both cases is the lithium treatment. Despite the lack of cause-and-effect relationship between mild clinical onsets of the COVID-19 infection and lithium usage, in both of the cases lithium may have contributed to the rapid negativity in PCR results. Recent studies showed that lithium also has antiviral activity by reducing Protein Kinase C and Arachidonic Acid turnover. In summary, lithium is known to have antiviral activity, but the available information about its therapeutic potential for coronavirus infection is still inadequate. Close examination of the antiviral properties of lithium and further studies with larger samples will be able to illuminate its use in the treatment of COVID-19 infection accompanying mood disorders, especially in children and adolescents.

**Keywords:** lithium, covid, pediatric

[Abstract:0203] [Others]

### 0203 - Electro-convulsive therapy induced hypomania: A Case report

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**INTRODUCTION:** Electro-convulsive therapy is a treatment modality, widely used to treat severe and treatment resistant depression, severe mania, catatonia and several other morbidities. It is particularly preferred when depressive symptoms are accompanied with psychotic features, refusal to eat or suicidal thoughts. Although ECT has been described as a mood stabilizer, with remission rates of 65.3% and 88.0% for bipolar depression and treatment-resistant mania, respectively; it can also induce hypomanic or manic episodes. In this report we aimed to present a patient who developed hypomanic symptoms after the ECT treatment.

**CASE PRESENTATION:** 66 year old, female patient was admitted to our clinic after 3 suicide attempts, she also had refusal to walk and eat. She had thoughts in which her vessels were



infested by demons. She had lack of energy and sleep disturbances. She also said she could hear the demons. Her complaints were noted to start 2 months ago, after an accident; she had slipped from the stairs and had a pelvic fracture. After the accident, she was operated and went through physical rehabilitation. No significant abnormalities were reported to be found in her physical examinations. It was noted that there were no clinical findings that prevented her discharge with respect to her general medical condition. In her psychiatric history; she had similar complaints 42 years ago (1980), after giving birth to her first child; she thought that her soul was leaving her body through her vessels and didn't leave the house for 1.5 years. She first admitted to a psychiatry clinic 29 years ago with sleep disturbances and lack of energy. Amitriptyline 25 mg/daily was prescribed and she had good adherence to her medications until 2015. In 2015 the drug dose was lowered to 10 mg/daily.

She was admitted to our clinic with the preliminary diagnosis of psychotic depression, duloxetine 30 mg/daily and olanzapine 10 mg/daily started to be administered. The dose of duloxetine was raised to 90 mg/daily during the hospitalization. After 2 weeks of treatment, she had no significant change in her complaints. ECT was decided to be administered with the consent of the patient and her relatives. After her 4th ECT session; It was observed that she developed insomnia, excessive talking, increased social interaction and increased psychomotor activity. Prior to the 4th session, walking refusal and social isolation were observed to reappear. The hypomanic symptoms continued for 2 days. The ECT treatment was resumed and completed 8 sessions. No other hypomanic symptoms recurred.

**CONCLUSION:** The present case highlighted that ECT could be a useful treatment modality for the psychotic features and resistance to treatment in depression. Whether to administer ECT after a manic/hypomanic episode should be considered according to the risks and benefits; regarding the current clinical situation of the patient.

**Keywords:** Electro-convulsive therapy, Hypomania, Psychotic depression

#### [Abstract:0206] [Addiction Psychiatry]

### 0206 - The Role of metacognition in the emergence of anger and aggression in patients with alcohol use disorder

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**OBJECTIVE:** In this study, we aimed to investigate metacognitive functions, anger and aggression and the relationship in patients with alcohol dependence. It is to have information about which metacognitive beliefs plays a role in the emergence of anger and aggression in people with alcohol dependence.

**METHODS:** The patient group diagnosed with Alcohol Use Disorder (AUD) according to DSM-5 (n = 72) and the control group without any psychiatric diagnosis (n = 71) were included in the study. Sociodemographic data form, Alcohol Use Disorders Identification Test (AUDIT), Metacognition Questionnaire (MCQ-30), Trait Anger and Anger Expression Scale (STAXI) and Buss-Perry's Aggression Questionnaire (AQ) were used.

**RESULTS:** In the AUD group, the MCQ-30, STAXI trait anger, anger out and anger in, and AQ scores were found to be significantly higher than the control group (p<0,001, p<0,001, p=0,018, p<0,001, p=0,001 and p=0,001, p<0,001, respectively). When comparing the correlation coefficients of MCQ-30 and other scales between the groups, a difference was found between the AUD group, trait anger and physical aggression (z=2,035; p=0,042 ve

$z=2,120$ ;  $p=0,034$ , respectively). As a result of the regression analysis performed in our study, it was found that the need to control thoughts is the most metacognitive beliefs that predicts aggression in people with AUD ( $\beta=0.567$ ,  $t(66)=4,034$ ,  $p<0.001$ ,  $r^2=0.20$ ).

**DISCUSSION:** As a result, the use of metacognitive functions is impaired in people with AUD, there is a positive correlation between controlling thoughts in AUD and the severity of alcohol use, and cognitive therapies may be considered in the treatment. In addition, the effort to control thoughts seems to be highly responsible for aggression in people with AUD. Clinicians working with people with AUD and anger problems Should keep in mind about the role of metacognition and should develop themselves in the field of metacognitive therapies.

**Keywords:** alcohol dependence, metacognition, anger

### [Abstract:0214] [Psychopharmacology]

#### 0214 - Clozapine induced myocarditis development in the late period: A Case report

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**INTRODUCTION:** Clozapin is an atypical antipsychotic which has been used as the gold standard treatment for schizophrenia. The need of clinical follow-up is emphasized especially in the first 6 months for fatal adverse reactions. Although hematologic side effects can be controlled to some extent by weekly blood monitoring, cardiac side effects constitute a clinical picture that can be incidental and fatal. When the literature was reviewed, the cases focused on the early period of clozapine treatment. This situation also seems to be related to a nonspecific clinical picture of cardiac side effects and decrease in the importance given to the follow-up due to the use of clozapin in the treatment of long-term schizophrenia.

**CASE PRESENTATION:** A 22-year-old male, single, college student patient has been followed up with a diagnosis of schizophrenia in a psychiatric outpatient clinic for 1.5 years under the treatment of clozapin. There is a known diagnosis of hydrocephalus. No smoking, alcohol and substance use. His first complaints started in 2018 with negative symptoms and positive symptoms were added to his complaints within six months. The patient's outpatient follow-ups (September 2020–April 2022) were based on clinical observation, laboratory data and consultations. There was no increase in the dose of clozapine in his follow-up and the clozapine treatment pattern was not changed. During the first six months of follow-up, the patient who complained of palpitations had no additional findings other than tachycardia as an FM finding. The patient was consulted to cardiology and metoprolol 50mg/g was started and it was stated that it should be continued throughout the use of clozapine. Cardiology was consulted with the preliminary diagnosis of myocarditis, when the patient had palpitations, shortness of breath, chest pain, troponin I: 41.18, which had persisted for 2 weeks (which could not be controlled despite the use of medication) in the patient's follow-up one year later. The cardiology clinic admitted the patient to the coronary intensive care unit with preliminary diagnoses of myocarditis, non-ST-elevation acute coronary syndromes (Non-ST AKS) after clinical findings and physical examination (tachycardia), electrocardiogram (nonspecific ST – T changes), echocardiography (tachycardia, LVH) findings. Coronary angiography was performed on the patient, and no lesion was observed. A significant decrease was observed in Troponin I during the follow-ups, and clinical observation and examination results were found to be consistent with myocarditis. The primary risk factor was evaluated as clozapine. Clozapine was tapered off and replaced with Risperidone 2mg/g and gradually increased to 6mg/g. The patient is still

being followed up asymptotically with the diagnosis of schizophrenia under risperidone treatment.

**CONCLUSION:** Myocarditis due to clozapine is an adverse reaction that can have fatal consequences. The suspicion of the relevant clinician is vital. In patient with schizophrenia with long-term drug use, clinical suspicion should always be kept alive regardless of period in terms of cardiac side effects that may develop in the use of clozapin. When the cardiovascular risk of clozapine and the fatal risk of myocarditis are evaluated together, it is stated that in case of developing tachycardia and/or chest pain in a patient who uses clozapin, myocarditis should be examined.

**Keywords:** clozapine, myocarditis, late onset disorders

[Abstract:0215] [Psychotherapy]

### **0215 - Can in vivo exposure be effective in the first session of an 8-year-old child with intense anxiety triggered by Covid 19?**

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**INTRODUCTION:** In this case report, we describe the successful treatment and cure of an 8-year-old girl with obsessive compulsive disorder (OCD) and anxiety symptoms in just two sessions of Cognitive Behavioral Therapy (CBT)

**CASE PRESENTATION:** After the birth of her brother during the pandemic period, the patient began to fear contamination and danger to herself and her family, leading her to avoid touching objects with the thought “what if I put my hand on my mouth”. She also had anxiety that if she touched or looked at chemicals such as bleach she would be poisoned. She refused to go to school for two weeks. There was no family history of OCD, but the mother had symptoms of anxiety and cat phobia.

The first session was devoted to psychoeducation about the nature of germs and the biological barriers of the human body. Afterward, brief information was given including anxiety, somatic symptoms and negative thoughts related to anxiety. She was motivated and willing to in-session exposure in order to model future exposures. She was able to touch objects in the room without washing hands, and licked the pen on the desk. Her anxiety gradually decreased after the trials. As homework tasks touching and licking objects at home and school was assigned with the patient and parents. Medical treatment was also suggested but the family didn't accept it. Her OCD symptoms and impairment significantly decreased after the intervention, She complied with her tasks and after the second session none of her previous symptoms were present anymore

**CONCLUSION:** The present case illustrates psychoeducation is the key point of OCD treatment, and invivo exposures can be applied in the first session of a motivated patient. Written consent was obtained.

**Keywords:** Anxiety, Covid-19, Cognitive Behavioral Therapy

**[Abstract:0216] [Mood disorders]**

**0216 - Maintenance ECT in treatment-resistant depression: a case report**

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**INTRODUCTION:** Treatment-resistant depression (TRD) is a subgroup of depressive disorder and its frequency is 20-30 percent of patients with depressive disorder. Although there is no consensus on the definition of TRD, it is generally defined as the state of not responding to two appropriate antidepressant treatments. Electroconvulsive therapy (ECT) is a frequently used method for patients with TRD. Maintenance ECT(M-ECT) therapy is the continuation of ECT therapy for a certain amount of time and frequency in order to prevent the relapse of the disease after acute treatment. We will present a case of chronic depression that responded to weekly ECT therapy after acute treatment, but with a marked deterioration in symptom severity and functionality when the frequency of treatment was reduced to once every two weeks.

**CASE PRESENTATION:** A 71-year-old female patient, who was diagnosed with major depression in 2015 was hospitalized in our inpatient clinic with the symptoms of unwillingness, anhedonia, hopelessness, anxiety and suicidal thoughts. In her history she reported that she had been hospitalized for 12 times due to depressive episodes, and she described with very short remission periods applied three times acute ECT regimens and three times TMS regimens had in the process. During the first hospitalization of the patient in our clinic, which lasted for three months, various pharmacological treatment approaches were applied to the patient, and the patient was discharged because she did not respond to the treatment. The patient, who was hospitalized for the purpose of applying ECT regimen after a 15-day break, responded dramatically to the regimen, which was started twice a week, after 4 sessions, and her symptoms disappeared almost completely. The patient, who underwent 6 sessions of ECT, was discharged, and a maintenance regimen was planned, twice a month and then once a month. As the patient deteriorated during the two-monthly ECT regimen, the patient was again taken to the acute regimen of 8 sessions, 2 sessions per week. For the patient whose complaints regressed rapidly with the acute regimen, a maintenance regimen was planned for four sessions once a week, followed by four sessions once every two weeks. When the frequency of ECT was reduced to once every two weeks for the patient whose well-being continued while on the weekly ECT regimen, the patient rapidly deteriorated and the complaints recurred. Because the patient was unresponsive to multiple pharmacological treatments, responded to the acute ECT regimen, relapsed with ECT one session for every two weeks, and continued remission with ECT once a week, maintenance ECT therapy was planned for the patient once a week.

**CONCLUSION:** In clinical practice, M-ECT therapy is often administered once a month. However, M-ECT frequency should be individualized according to the clinical condition of the patient. Especially in more severe, recurrent and treatment-resistant cases, M-ECT may need to be applied more frequently.

**Keywords:** ECT, maintenance ECT, treatment-resistant depression

[Abstract:0226] [Schizophrenia and other psychotic disorders]

**0226 - Efficacy of twenty sessions of rTMS applied to motor cortex in tardive dyskinesia: 6-month follow-up case report**

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**INTRODUCTION:** Tardive dyskinesia (TD) is an involuntary movement disorder often associated with antipsychotic use (1,2). In this article, 20 Hz repetitive transcranial magnetic stimulation (rTMS) applied to the motor cortex in TD developing in a patient with schizophrenia is safe and its long-term effectiveness in symptom improvement will be explained.

**CASE PRESENTATION:** AET, 27 years old, single, male patient; It was learned that he had a history of schizophrenia, used multiple antipsychotics, and had tardive dyskinesia symptoms such as blinking, smacking and opening his mouth for 3 months. The patient's treatment was changed to clozapine 12.5-400 mg/day. After six months, improvement was observed in psychotic symptoms, but no improvement in TD. The patient's Abnormal Involuntary Movements Scale (AIMS) score was calculated as 11. The patient and her relatives were informed about rTMS, and their written consent was obtained. rTMS(1000 per hemisphere, total 2000 stimuli/day at 20Hz 100%RMT) was applied over the hand/arm area of the motor cortex (M1) for 20 consecutive days. The patient did not report headaches, seizures, or any other side effects during and after treatment. To the patient's pharmacotherapy; It was continued with fixed doses for 6 months before and after the application. A 54,6% decrease was observed in the patient's AIMS score (AIMS score: 5 points). The treatment remained effective at 6 months after the application (AIMS score 5).

**CONCLUSION:** The results of the treatment suggest that 20 consecutive sessions of 20Hz rTMS applied to the motor cortex in TD can significantly reduce the AIMS score without complications and improve the symptoms of TD.

Prevention of TD is of primary importance. Treatment; includes antipsychotic medication switching, dose reduction, discontinuation, using higher doses to mask TD symptoms. Switching to second-generation antipsychotics with lower D2 affinity, such as clozapine, may be effective in reducing symptoms (1). Although there are reports that clozapine worsens or induces TD, most evidence supports that it is an effective treatment (2). In our case, it was observed that clozapine improved psychotic symptoms but did not improve TD symptoms. It has been reported in the literature that VMAT inhibitors (deutetrabenazine, valbenazine) are effective in the treatment of TD (1).

It has been shown that deep brain stimulation (DBS) improves symptoms in severe resistant TD cases and can be an effective option in these cases (2). It has been reported that rTMS applied to the motor cortex for 10 consecutive days in TD patients reduces AIMS scores (3). Our results support that rTMS can be an effective treatment option in patients with resistant-severe TD, who cannot tolerate drugs, worried about their side effects, whose symptoms cannot be adequately controlled, and who avoid invasive applications.

**Keywords:** Tardive dyskinesia, repetitive transcranial magnetic stimulation, motor cortex

[Abstract:0228] [Others]

**0228 - Factitious disorder in child and adolescent alcohol and drug addiction treatment and research centre; a case report**

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**INTRODUCTION:** Behaviors that cause the child's health, physical and psycho-social development to be affected negatively by an adult consciously or unconsciously are defined as child abuse. There are many types of child abuse. Munchausen by proxy syndrome (MPS) is planned to be presented because it is one of the abusive types and it was aimed to draw attention to the importance of awareness for the diagnosis of MPS.

**CASE:** A 14-year-old, 9th grade male patient living with his mother admitted to the Child and Adolescent Alcohol and Drug Addiction Treatment and Research Centre (CEMATEM) of our hospital with complaints of irritability, red eyes, fainting and abstraction. It was learned from the mother that the child had used white powder and there were changes observed in his behavior. However, the substance use history given by the child was inconsistent with the conventional uses. The patient had a febrile seizure at the age of 1 and used epilepsy medication until the age of 5, he had a history of multiple past health care services. When family history of psychiatric disorders was assessed, it was learned that the father had a substance use disorder, the mother was treated for major depressive disorder. There was no forensic story. The patient who had a high demand for hospitalization was admitted to the CEMATEM inpatient clinic. In the laboratory tests revealed no pathological findings. The substance was negative in urine toxicology tests. The patient, who was discharged from the service, had multiple applications to the CEMATEM outpatient clinic after discharge, all with his mother. In these applications, his mother described different complaints such as irritability, aggression, substance use, foreign body ingestion and demands hospitalization due to lack of response to treatment. As a result of the requested social examination report and repeated examinations with the patient, it was determined that the patient was exposed to physical and emotional abuse from the mother at home, did not use substances, wanted to hospitalized because he did not want to stay at home. The complaints regressed after the child was placed in the institutional care.

**DISCUSSION:** The clinical presentation of factitious disorder is mostly physical symptoms. Estimation of prevalence is difficult, but represents 0.5-2% of general hospital admissions. Although people with factitious disorders want to be 'sick', they often do not want to be psychiatric patients. This may be due to the possibility of stigmatization in social perception or the lack of the desired type of care and attention. Our case differs from the literature in this respect.

**Keywords:** munchausen by proxy, factitious disorder, child abuse

**[Abstract:0230] [Psychopharmacology]**

**0230 - Aripiprazole treatment in clozapine-related obsessive-compulsive symptoms in a child with very early-onset schizophrenia**

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**INTRODUCTION:** It is known that clozapine treatment is associated with the development of Obsessive Compulsive Symptoms (OCS). In this case, we present a patient diagnosed with very early-onset schizophrenia who developed OCS with clozapine treatment. Her symptoms were significantly improved with aripiprazole treatment.

**CASE REPORT:** A 13-year-old girl was brought to our emergency department with complaints of shouting, aggression, and talking to herself. She had irritability and social withdrawal for 2 years, could not attend school, and could never return to her premorbid functionality despite the use of multiple antipsychotics including risperidone, amisulpride and olanzapine.

In her mental state examination, she had decreased self-care, had a negative attitude and her mood was irritable and her affect was angry. Delusions and hallucinations could not be evaluated because the patient did not reveal the content of thought. No significant pathology was found in the examination performed at pediatric neurology consultation. Clozapine was started and titrated to 375 mg/d. After clozapine dose is increased, patient developed compulsive symptoms, to manage compulsive symptoms sertraline was added to the treatment. Since there was disinhibition with sertraline, it was discontinued and aripiprazole was started. OCS regressed after aripiprazole treatment. The patient whose PANSS scales regressed was discharged with aripiprazole and clozapine treatment.

**CONCLUSION:** The high antiserotonergic effects of clozapine and its relatively low dopamine D2 receptor antagonism are thought to play a role in causing OCS. In our case, the use of aripiprazole, a partial dopamine and serotonin receptor agonist, was effective in the treatment of clozapine-related OCS. Additional research should be done to assess the effect of aripiprazole in the treatment of clozapine-related OCS.

**Keywords:** clozapine, obsessive compulsive symptoms, aripiprazole

**[Abstract:0249] [Autism Spectrum Disorders]**

**0249 - Immunotherapy in autism spectrum disorder; A Case series**

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**INTRODUCTION:** Research has shown that a subset of the autism spectrum disorder (ASD) population presents with immune dysregulation. Based upon immunological abnormalities, various treatment modalities have been applied to children with autism. One immunomodulatory treatment that has been studied in ASD is intravenous immunoglobulins (IVIG). A prior researches about ASD suggested potential autoimmune etiology based on the presence of autoantibodies and on successful treatment with immunotherapy that included intravenous immunoglobulin (IVIG). In this report, we describe two cases who diagnosed with atypical autism and started IVIG treatment.

**CASES:** Both patients were diagnosed with autism. Case A 5-year-old female were diagnosed with atypical autism at age 3. The second case B a 9 -year-old male who was 7th grade student, also diagnosed with autism at age 3. The first patient's autism symptoms was noticed by family at the age of 2. In the anamnesis taken from the mother, the patient, who had babbling, could say 1-2 words and followed simple commands, had lost the skills towards the age of about 3. Verbal and non-verbal communication skills were lost, eye contact decreased, started to spinning around herself. The patient had no history of disease. Similarly, the second patients acquired skills were lost at the age of 2-3 after having recurrent infections. He had poor eye contact, did not respond to his name, had stereotypical movements and sensory hypersensitivity. Both patients did not have any psychiatric or neurological disorders in their families. Based on deficits in social-emotional reciprocity, deficits in nonverbal communicative behaviors used for social interaction, restricted, repetitive patterns of behavior, both patients were diagnosed Autism Spectrum Disorder. Considering the studies related to ASD that responded positively to the immunomodulatory treatment, IVIG treatment was started in both patients at a dose of 1 mg/kg/month. First patient received IVIG once in a month, total 5 infusions had been applied. Second patient received total 12 infusions with the same protocol. Treatment response was assessed with the Childhood Autism Rating Scale (CARS)

**DISCUSSION:** In these two cases of atypical autism treated with IVIG, subjective partial reduction in autism symptoms and objective decrease in CARS scores were detected. Current evidence suggests that there are various factors contributing to the development of autism and different combinations of these aspects give rise to variation in subtypes of ASD. Some of these factors support the emerging hypothesis of the connection between immune system impairments and ASD. This report provide support for the notion that at least a subset of children with ASD have immune abnormalities and may respond to the immune modulating effect of IVIG therapy. Clearly, further studies will be needed to better understand the potential subgroups of children with ASD and immune abnormalities.

**Keywords:** autism spectrum disorder, ivig, immunotherapy

[Abstract:0255] [Psychopharmacology]

### **0255 - A Patient who attempted suicide with a lethal overdose of venlafaxine and survived without sequelae**

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**INTRODUCTION:** Patients with major depressive disorder (MDD) have suicidal thoughts depending on the symptoms of the disease. These passive suicidal thoughts sometimes end with the suicide attempt.. Antidepressant drugs are generally used in the treatment of major



depressive disorder, but patients attempt suicide with the drugs they use for their treatment. In this case report, we aimed to present a patient who had suicide attempt with venlafaxine, one of the SNRI drugs used for the treatment of a patient with major depressive disorder, had serotonin syndrome, and then had no physical sequelae.

**CASE PRESENTATION:** A 24-year-old female patient was followed-up for a major depressive disorder at the external center for 4 years before admission. There the medical treatment of venlafaxine 150mg / g was arranged. In 2017, she attempted suicide by taking 45 Venlafaxine 150 mg extended -release tablets and was brought to the emergency department by her friend. The patient who was evaluated in the emergency department had generalized tonic clonic seizures that lasted about 2 minutes for two times and she was unconscious for 15 minutes between the two seizures. The patient was then intubated. After the patient was referred to the Anesthesiology Intensive Care Unit, she was found to have poor general condition, GCS 4, pupillary mydriatic, light reflex (-), diffuse tonic clonic contractions and hyperpyrexia. The patient developed cardiac arrest twice with 65-minute intervals following ventricular tachycardia attacks, and was then returned with CPR. After being conscious and extubated, the psychiatric department was consulted for suicide attempt and serotonin syndrome. The patient's history revealed that she had been followed in the psychiatry department of the external center since 2013 with complaints such as crying during the day, unhappiness, inability to enjoy life, not being able to work in her classes, seeing herself worthless and wanting to die. Venlafaxine 150mg / g was administered to the patient and she did not attend regular follow-up visits. The patient was diagnosed with major depressive disorder and his medical treatment included risperidone 2 mg / g, duloxetine 60mg / g, long-acting methylphenidate 27mg / g. Long-acting methylphenidate was started because of cognitive deficits and it was aimed to increase the dose during follow-up. After 2 years of regular follow-up, her depressive symptoms decreased and her functionality improved. Her current medical treatment included duloxetine 90 mg / g and methylphenidate 54 mg / g.

**CONCLUSION:** The lethal dose of venlafaxine occurs after 5000 mg intake. Overdose of venlafaxine causes vomiting, sedation, generalized tonic clonic seizures, QT prolongation, and very rarely cardiac arrest. In our case, the patient received a total dose of 6750mg venlafaxine. Venlafaxine, serotonin and noradrenaline is a phenylethylamine derivative that blocks presynaptic uptake and facilitates neurotransmission in the brain. In patients with major depression, venlafaxine doses of 75 to 375 mg / day administered over 6 weeks had a significant effect than placebo.

When evaluated together with the literature, venlafaxine prescription should be performed more carefully or closely monitored in patients with suicidal thoughts.

**Keywords:** Venlafaxine, serotonin syndrome, suicide attempt

[Abstract:0257] [Others]

### 0257 - Body dysmorphic disorder: Case series

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**INTRODUCTION:** Body Dysmorphic Disorder (BDD) is a psychiatric illness which characterized by the excessive preoccupation of individuals with an imaginary defect or a minor physical defect related to their external appearance and intense anxiety about this defect, and a

significant impairment of their functionality (which leads to significant impairments in the professional and social life of the person). People who have such concerns about their physical appearance frequently apply to non-psychiatric physicians and are exposed to one or even more than one cosmetic surgery or dermatological interventions. It is known that appropriate and adequate pharmacotherapy in body dysmorphic disorder is effective in correcting the crystallized symptoms of the disease and also improves functionality.

**CASE PRESENTATION:** In this case, eight newly diagnosed patients with body dysmorphic disorder, aged between 18-42 years, admitted to a university hospital psychiatry clinic between 2019-2021 were included. Considering the clinical features of the patients, five were female and three were male. Of the women, four had dissatisfaction with their nose and one with his/her skin, and all patients who had discomfort with their nose applied to us after the surgery. One of the male patients is dissatisfied with the nose, one with the hair, and one with the height and has no history of surgery. All eight patients agreed to be the first treatment, and fluoxetine 40 mg was started gradually. Since only 1 patient could not tolerate the treatment, sertraline 100 mg was switched after 1 month. When the polyclinic records of the 3-month follow-up of these patients were examined, they stated the significant decrease in their own symptoms. In the outpatient clinic follow-ups, the symptoms of all patients on body parts decreased significantly, and the search for treatment in this regard was lost.

**CONCLUSION:** Body dysmorphic disorder manifests itself as a psychiatric disorder that significantly impairs functionality and causes unnecessary surgical interventions. When the disease is recognized at an early age and necessary referrals are made, the functionality of the patients improves and unnecessary surgical and cosmetic interventions are prevented.

**Keywords:** Body Dysmorphic Disorder, Fluoxetine, Plastic Surgery

[Abstract:0261] [Attention deficit hyperactivity disorder (ADHD)]

### 0261 - Atomoxetine-induced erythematous papular rash

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**INTRODUCTION:** Exanthematous rashes are by far the most common cutaneous adverse effects reported with the use of psychotropic medications (1). It is characterized by erythematous macules and/or papules. Atomoxetine is a non-stimulant drug used in the treatment of Attention Deficit Hyperactivity Disorder (ADHD). We present a patient with ADHD and Specific Learning Disorder who experienced papular rash following atomoxetine treatment.

**CASE PRESENTATION:** A ten-year-old boy applied with complaints of being easily distracted, failing to finish homework, and losing things. The detailed evaluation revealed that he was a hyperactive and inattentive child who struggled academically. He had poor writing and reading skills. Wechsler Intelligence Scale for Children-Revised form was administered to the patient. It showed a verbal IQ of 77, a performance IQ of 102, and a total IQ of 88. The patient was diagnosed with ADHD and Specific Learning Disorder according to DSM-V and an osmotic-release oral system methylphenidate form (18 mg/day) was commenced. The patient developed aggression and irritability within two days of the initiation. After the methylphenidate discontinuation, side effects were no longer present.

Treatment of atomoxetine (ATX) at 25 mg/day was started. Titration to 60 mg/day was planned for the third week. At the dose of 40 mg/day, the patient reported lesions on the face, arms, thorax, and thighs. The patient was referred to Dermatology and Pediatrics. The lesions were evaluated as excoriated, erythematous papular lesions due to atomoxetine. Discontinuation of atomoxetine appears to lead to rapid resolution of the eruptions.

The patient's symptoms were assessed with Naranjo adverse drug reaction probability scale and revealed a score of 7, indicating a probable causality for the adverse drug reaction.

**CONCLUSION:** Based on the existing literature, cutaneous exanthematous drug reactions most frequently present themselves clinically as maculopapular rash, but they can also present in different forms (2). Hypersensitivity reactions related to atomoxetine are observed in 2% of patients and it is considered a rare adverse effect (3). There have been few reports describing the dermatological effects of atomoxetine, mostly maculopapular eruptions reported in the literature. In our case, the lesions were observed as excoriated, erythematous papules. The clinicians should be aware that cutaneous adverse effects may occur during atomoxetine treatment and it can be seen other than in maculopapular form.

Informed consent was obtained from the parents.

**Keywords:** ADHD, atomoxetine, drug eruption, rash

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**Erythematous papular rash on the thorax**



**Papular rash on the arm**



[Abstract:0265] [Disruptive behavior disorders]

**0265 - Treatment of aggression with topiramate in a 10-year-old girl with mild intellectual disability**

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**INTRODUCTION:** Intellectual disability is associated with a higher prevalence of behavioral disorders such as biting, hitting, head banging, screaming, and deliberately destroying others' property than in the general population. Atypical antipsychotic drugs are the first line of pharmacologic agents used in the treatment of behavioral disorders. However, those agents carry a risk of side effects such as weight gain, type 2 diabetes, QTc prolongation, and lowered seizure threshold. Anticonvulsants are also recommended for managing hyperactivity, aggression, and agitation. Recent studies have suggested that topiramate decreases appetite and reduces self-abusive behavior. Furthermore, topiramate is effective for managing emotional instability. Here we present a case with high body mass index (BMI: 30.8), behavioral disorders, epilepsy, and intellectual disability showing significant response to topiramate treatment.

**CASE PRESENTATION:** A 10-year-old girl who was previously diagnosed with mild intellectual disability and epilepsy presented with increased complaints of disruptive behaviors. She applied with complaints of aggressive behaviors towards others (screaming, hitting), breaking furniture, nail-biting, impulsiveness, poor frustration tolerance, temper tantrums, defiance, and irritability. A detailed history was obtained. She had a febrile seizure when she was 8-month-old and prescribed valproic acid. For the last year, she had no seizures hence, valproic acid was discontinued. She was on psychiatric follow-up since she was 4-year-old for disruptive behaviors. The patient was initially prescribed Risperidone 0,25 mg/day and was increased up to 2 mg/day. No significant improvement was observed at the end of 4 years. With ceasing Risperidone, 2,5 mg/day of Aripiprazole was started and increased up to 10 mg/day. Aripiprazole was discontinued due to poor response after one year. During follow-up, she was referred to Pediatric Genetics Department with the suspicion of Prader-Willi Syndrome (PWS) on account of her dysmorphic facial structure, almond-shaped eyes, and hypertelorism. Her clinical exon analysis showed a strong risk of PWS therefore, MLPA analysis was indicated, however, the results are pending. Due to her being obese and having near no positive effect with Aripiprazole, we started topiramate with an initial dose of 25 mg/day and increased gradually, being approximately 25 mg/week, until reaching the dose of which positive effect was seen (250 mg/day). She benefitted from topiramate greatly losing weight (-4 kg/2 months) and an apparent reduction in disruptive behaviors. The CGI chart was used to track progress over time. The patient's global assessment changed from a CGI-S of 6 on admission to a CGI-S of 3 post-treatment. Also, her CGI-I score decreased, from 5 to 2, and her CGI- E score from 4 to 1.

**CONCLUSION:** Our case suggests that in children with high body mass index, epilepsy, intellectual disability, and behavioral disorders, topiramate should be kept in mind especially when atypical antipsychotics show no effect. Topiramate is well tolerated by patients and has fewer side effects. More studies are needed for the use of topiramate to better understand its effects and side effects in children for the treatment of behavioral disorders. Written informed consent was obtained from the patient's parent.

**Keywords:** Aggression, Behavioral Disorders, Intellectual Disability, Topiramate

**[Abstract:0269] [Mood disorders]**

**0269 - Catatonia related to medical conditions: A Case study**

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**INTRODUCTION:** Electroconvulsive Therapy (ECT) has been widely used for therapeutic intervention in various psychiatric disorders such as bipolar disorder, schizophrenia, and major depressive disorder. Its place for specific psychiatric emergencies like catatonia remains elusive. Here we demonstrate a patient with repeating catatonia when maintenance ECT stopped, diagnosed with diffuse large b-cell lymphoma (DLBCL) later.

**CASE PRESENTATION:** A 73-years-old female diagnosed with bipolar disorder and remission with lithium monotherapy was referred to the neurology department with tremors. After the cessation of lithium, the patient showed up in the psychiatry outpatient department with manic symptoms. Concomitantly, the patient was diagnosed with Parkisons' disease by the neurology department and started levodopa treatment. Anxiety and hallucinations appeared after the levodopa treatment; thus, the patient was hospitalized. During her two-week hospitalization, she was diagnosed with dementia and started donepezil. After a month of her discharge with maintenance medical treatment, she showed up with catatonia. Due to insufficient response to medical treatment and side effects, the patient received ECT and was discharged with remission with mild cognitive side effects of ECT. Catatonia relapsed after five months of the euthymic phase. After her fourteen ECT sessions, she is remitted and receives a maintenance ECT regimen weekly. After one year of well-being, she was rehospitalized with depressive symptoms and diagnosed with DLBCL after her blood tests.

**CONCLUSION:** Catatonia, as a psychiatric emergency, can be treated by medication or neuromodulatory such as ECT. Catatonia is a cluster of symptoms that constitutes a syndrome in which 20% of patients have a non-psychiatric underlying cause. In our case, underlying complicated medical conditions might trigger relapsing catatonia. For our case, this might explain the necessity of maintenance ECT to prevent relapsing of catatonia.

**Keywords:** Catatonia, Electroconvulsive Therapy, Lymphoma

**[Abstract:0270] [Mood disorders]**

**0270 - Acute psychotic symptoms associated in vitro fertilization procedure: A Case report**

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**INTRODUCTION:** Psychiatric symptoms associated with hormone treatments occur in the clinic such as depression, anxiety, psychosis. However, estrogen was thought to be a protective factor in the onset of psychotic disorders in women later. Supporting this, there are cases of psychotic attacks triggered by estrogen withdrawal in the literature. Herein, we correspond to the case of a patient who demonstrates a manic episode with psychosis after using follitropin alfa, human menopausal gonadotrophin (HMG), somatotrophin and cetorelix.

**CASE PRESENTATION:** A 33-year-old female started in-vitro fertilization treatment for infertility secondary to polycystic over syndrome. She used follitropin alfa (recombinant human

follicle-stimulating hormone), human menopausal gonadotrophin (combination of luteinizing and follicle-stimulating hormones), and somatotrophin (growth hormone) sc for two weeks. At the end of two weeks, a single dose of cetrorelix (GnRH antagonist) sc was administered. Insomnia and irritability begin seventeen days after Cetrorelix treatment. Then she developed an increase in the amount of speech, persecutory delusions (“thinking that her partner is plotting against her”), and psychomotor agitation. There is no previous history of manic or depressive episodes. At age 15, he applied to child psychiatry due to suspicion. Olanzapine treatment was started and then tapered off. She reported no family history of psychiatric problems and denied illicit drug intake.

**CONCLUSION:** Low estrogen levels are thought to be associated with psychosis. In susceptible women, reducing estrogen levels could induce psychosis. In this case, estrogen levels were not measured, but we suppose they were declined due to cetrorelix- GnRH antagonist. Revealing any prior psychiatric disorder in women with infertility is essential, especially before initiating therapy with GnRH antagonist. Thus, estrogen-reducing treatments used in gynecology must be carefully monitored.

**Keywords:** Estrogen; estradiol; gonadotrophin; GnRH antagonist; in vitro; psychotic; mania

[Abstract:0271] [Mood disorders]

### 0271 - Mania and seasonality as grief reaction

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**INTRODUCTION:** The grief reaction is a normal process of accepting the loss after the loss of a loved one or object. Due to the fact that it is the period in which some mental symptoms can be seen without mental illness, it is constantly up-to-date in DSM discussions. It has an important place in daily psychiatry practices in terms of triggering mental illnesses and certain periods of mental illnesses. Although it comes to mind mostly in the diagnosis of Post Traumatic Stress Disorder and Major Depression, it can be a triggering factor in all psychiatric disorders. In this context, we will discuss a case who had his first manic episode after the loss of his father and had a manic episode again after 16 years as an anniversary reaction.

**CASE PRESENTATION:** In the mental state examination, He looked compatible with his age, gender and sociocultural level. He was willing to talk and relate. He was conscious and fully oriented. Concentration and maintenance were insufficient. His immediate memory was insufficient, his near and far memory was sufficient. Auditory hallucinations are present, associations are scattered. Her mood was dysphoric, her affect was labile. Reference-persecution delusions, grandiose delusions were present, There was no suicidal ideation. There was an increase in energy. Her appetite was normal, her sleep pattern was disturbed and her need for sleep decreased. Judgment and truth assessment were inadequate, he had insight. The patient had no known history of additional disease. She had no history of smoking, alcohol or substance use. Bipolar Disorder Manic episode was considered again with these findings. The Young Mania Rating Scale score given to the patient during the interview was 33. It didn't show karma. Lithium 300 mg 2\*1 and Risperidone 2 mg 2\*1 treatment, which was beneficial for the patient before, was restarted by adding 2 mg Biperiden. The patient was re-evaluated in the outpatient clinic one week later. It was observed that his mood symptoms partially regressed, but his psychotic symptoms continued. The patient was admitted to the closed male ward in order to have sensitivity to side effects and not to prolong the duration of the episode

**CONCLUSION:** Although it is higher in Major Depression and Post-Traumatic Stress Disorder, the rate of complicated grief in patients with Bipolar Disorder is 24% (1,2). Similarly,

separation anxiety scores were also found to be significantly higher (3). Similar to the literature, there are cases of mania as complicated grief (4), and there are also population-based studies (5). In the table taken from the study by Kenes et al., it is seen that losses at an early age increase the risk of depression, while losses at a later age increase the risk of manic episodes. Another intersection of bipolar disorder and complicated grief is seasonality. The seasonal course of bipolar disorder and recurrent depression may be confused with complicated anniversary reactions. In the light of all this information, psychosocial factors should definitely be considered in bipolar disorder, whose biological aspect is at the forefront.

**[Abstract:0296] [Psychopharmacology]**

**0296 - Trends in the overlap of rare diseases and psychopharmacology: Sotos syndrome with orofacial dyskinesia**

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**INTRODUCTION:** Sotos syndrome is a rare genetic syndrome characterized by excessive growth during childhood, macrocephaly, and distinctive facial gestalt. Children with Sotos syndrome frequently have intellectual disabilities, and most also have behavioral issues. Since these misbehaviors often co-occurred with psychiatric problems, their management can be burdensome. Psychopathologies may include autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), tantrums, and impulsive behaviors in Sotos syndrome. In this report, the pharmacologic implications of a case with orofacial dyskinesia after prescribed poly-psychopharmacologic treatments are discussed.

**CASE PRESENTATION:** We report a 9-year-old boy with a diagnosis of Sotos syndrome, ASD, and ADHD who presented with abnormal orofacial movements after methylphenidate (MTP) use for the management of hyperactivity and self-destructive behavior. Many psychopharmacologic medications (risperidone, aripiprazole, olanzapine, haloperidol, sodium valproate, atomoxetine) were prescribed at different times before MTP however, could not be responded. Laboratory tests were within normal limits. His family history was unremarkable and negative for other neurological diseases. MTP was withdrawn, Lorazepam 0.5 mg was prescribed, and the symptoms recovered. Informed consent was obtained from the parents.

**CONCLUSION:** Orofacial Dyskinesia secondary to MTP probably occurs due to influences in the dopaminergic pathway. It may be closely related to a disbalance state of the neurotransmitter, in which an increase or decrease of dopamine could lead to abnormal movements. In cases accompanied by such comorbidities and rare diseases, it is crucial to be more careful against this side effect.

**Keywords:** Dyskinesia, Methylphenidate, Rare diseases, Sotos syndrome



**[Abstract:0335] [Autism Spectrum Disorders]**

**0335 - Association of monosomy 1p36 syndrome and autism spectrum disorder: A Case report**

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**INTRODUCTION:** Monosomy 1p36 syndrome is a well-known syndrome with multiple congenital anomalies and develops due to deletion of the distal part of the short arm of chromosome 1. This syndrome presents with psychomotor and mental retardation, prenatal and postnatal growth retardation, hearing loss, short stature, brain anomalies, congenital heart defects and typical facial findings (1). 1p36 microdeletion syndrome is the most common terminal deletion in humans (2). Autism Spectrum Disorder (ASD) is characterized by impairments in social cognition and communication, and restricted and repetitive behaviors (3). In this article, a case with Monosomy 1p36 Syndrome and diagnosed with ASD is presented. **CASE:** A female patient aged 5 years and 8 months applied to our polyclinic with a request for a special education report accompanied by her mother. In the anamnesis taken, the patient received special training with a moderate intellectual disability report, did not react to her name, had 10-15 words, did not make eye contact, had stereotypes, did not take simple commands, was diagnosed with monosomy 1p36 deletion syndrome as a result of postnatal genetic analysis, cardiac anomaly was known to be. The patient showed dysmorphic features of monosomy 1p36 syndrome and was using Levetiracetam 300 mg with the diagnosis of epilepsy. As a result of the evaluations, it was thought that the patient had a diagnosis of autism spectrum disorder and the patient was referred to special education.

Written informed consent was obtained from the patient's family.

**CONCLUSION:** To the best of our knowledge, there are no studies or cases showing the association of autism in patients with monosomy 1p36 deletion. Evaluation of cases with monosomy 1p36 deletion in terms of autism spectrum disorder is important in terms of education of patients. Our case is valuable in terms of showing this association.

**Keywords:** autism spectrum disorder, Monosomy 1p36 syndrome, intellectual disability

**[Abstract:0336] [Anxiety disorders]**

**0336 - Erection after misophonia in a pediatric patient: A Case report**

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**INTRODUCTION:** Misophonia describes a phenomenon in which affected individuals exhibit a strong negative physiological and emotional response when confronted with certain auditory stimuli. The individual is disturbed by daily sounds such as chewing gum, breathing, smacking, snoring, coughing, yawning, eating, etc. The first manifestation of symptoms is in childhood and adolescence in more than 80% of cases. The etiology of misophonia has not been

determined exactly, and it may be associated with various psychiatric and physical diseases. In this article, a 9-year-old case of erection with misophonia is presented.

**CASE PRESENTATION:** 9 years old male patient M.C. applied to our polyclinic with complaints of being uncomfortable with the pronunciation of "F,Ş,P" and not being able to control her anger towards sounds. In the anamnesis; it was learned that her complaints started after her brother was born 4 years ago, and his feeling of discomfort and irritability lasted for about half an hour. It was learned that when he heard a disturbing sound, an erection occurred in his genitals and this hardening was evident on his clothes. The blood tests taken were evaluated as normal. Aripiprazole treatment was discontinued in the patient who did not respond to Aripiprazole 3mg/day treatment, which was started in another center, for 6 months. Fluoxetine 10 mg/day was started to the patient in our outpatient clinic, and the patient's misophonia and accompanying erection symptoms completely disappeared after 4 weeks. Treatment was continued with fluoxetine 10 mg/day.

Written informed consent was obtained from our patient and his family.

**CONCLUSION:** Although misophonia is a new definition that has not been sufficiently clarified; There are no studies in the literature on erection after misophonia. Our case is important because erection after misophonia is a rare condition in pediatric population and there is no such example in the literature.

**Keywords:** Children, erection, misophonia

[Abstract:0338] [Mental retardation]

### 0338 - Coexistence of vitiligo and down syndrome: A Case report

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**INTRODUCTION:** Down syndrome (DS) is a congenital autosomal anomaly characterized by growth and mental retardation. DS occurs as a result of additional duplication of chromosome 21 (1). Vitiligo is a pigment disease characterized by loss of number and function of melanocytes. Its etiology is unknown. However, autoimmune, genetic, biochemical factors and neural mechanisms are prominent in the etiology (2,3). Autoimmune disorders are common in patients with DS. Mental retardation and accompanying skin findings in DS suggest a relationship between the skin and the nervous system. In this study, a case with a diagnosis of DS accompanied by vitiligo will be evaluated.

**CASE:** Our case is a 16-year-old girl with cognitive developmental delay and a diagnosis of DS. In the anamnesis, it was learned that her perception and judgment were behind her peers, her speech was incomprehensible because she could not say some letters clearly, she did not know the letters, and she did not know the colors well. On physical examination, she had an obese appearance, widespread hypopigmented areas on her body, and the frontotemporal part of her hair was completely white in color. In the WISC-R intelligence test (Wechsler Intelligence Scale for Children), the total score of the patient was found to be between 35-49. When intellectual disability was detected in the patient, the patient was also referred to dermatology.

**CONCLUSION:** Our case is important in that DS, which is a genetic and congenital disease,

is associated with vitiligo disease, in which autoimmunity plays an important role in the etiopathogenesis. Mental retardation, which is a clinical feature of DS, and accompanying skin findings have raised the question of what kind of relationship there is between the skin and the nervous system. Studies and clinical applications related to psychocutaneous diseases should be addressed in children and adolescents.

**Keywords:** autoimmune disorder, child, down syndrome, vitiligo

[Abstract:0343] [Psychopharmacology]

**0343 - Serotonin syndrome in a patient taking clomipramine and paroxetine concomitantly: A Case report.**

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**OBJECTIVE:** Serotonin syndrome (SS) is a clinical condition resulting from serotonergic overactivity at synapses of the central and peripheral nervous systems. The true incidence of the disease is unknown, given that it varies in severity and many of its symptoms may be common to other clinical conditions. The diagnostic basis of SS is that in patients exposed to any drug that increases the activation of serotonin (5-hydroxytryptamine; 5-HT) receptors in the body, altered mental status (anxiety, confusion, agitation, hallucinations, coma), autonomic hyperactivity (hyperthermia, hypertension, tachycardia, tachypnea) and neuromuscular abnormalities (tremor, hyperreflexia, clonus, rigidity) [1, 2]. These drugs include SSRIs, monoamine oxidase inhibitors (MAOI), opioid analgesics, antiemetics, illicit drugs, and others [3]. Clinical findings may be mild, moderate, or severe. In its mild form or initial stage, it is characterized by irritability, sweating, and diarrhea. As its severity increases, it can be life-threatening with coma, severe hyperthermia, and rigidity [4].

**CASE PRESENTATION:** Here, we present a 17-years-old male with a diagnosis of obsessive-compulsive disorder who developed serotonin syndrome after an increase in the dose of clomipramine while under treatment with paroxetine and clomipramine. In the examination his symptoms were; agitation, muscle contraction, rigidity, tremor, and shivering. Serotonergic agents were discontinued, and lorazepam was used for agitation in addition to intravenous fluid. After his general condition and vital signs improved, his treatment was reordered.

**CONCLUSION:** Considering that this pharmacological complication will be seen more and more with the increasing use of serotonergic drugs today, physicians should aware of the potential side effects of psychopharmacologic drugs in particular serotonin syndrome, and be cautious for the condition.

**Keywords:** Serotonin syndrome, clomipramine, paroxetine,