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POSTER PRESENTATIONS

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Visual hallucinations induced by bupropion: A case report

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Bupropion is an antidepressant, which inhibits reuptake of norepinephrine and dopamine. It is a relatively reliable antidepressant in terms of side effects and also is used in the treatment of nicotine deprivation (1, 2). Most frequent side effects are insomnia, dry mouth, and headache (3). Here we present a case who developed visual hallucinations during bupropion treatment.

Case: F.Y: A 51 year old woman was admitted to the outpatient clinic with complaints of hump, horror, and seeing spider images. Visual hallucinations, anxiety, irritability, insomnia, and anhedonia were noted on psychiatric examination. Except for the visual hallucinations, there was no other perception abnormality nor other psychotic symptoms. History: she reported to a psychiatrist with complaints of joylessness, weakness, fatigue, and anhedonia. She was diagnosed with major depressive disorder and subsequently was put on bupropion 150mg/day. After a week, the dosage of bupropion was increased to 300mg/day. On the first day of the bupropion dose increase to 300 mg/day, spider images developed in both of her eyes and in the following days these images increasingly continued. The images lasted for days and scared the patient, ruined her sleep pattern, and increased her anxiety. The patient saw an ophthalmologist with these complaints and at the medical examination there was no evidence of an organic or pathological disorder. Her blood pressure was under control with treatment. The patient had been treated with escitalopram and duloxetine 6 years ago with a diagnosis of depressive disorder, but the patient specified that she had not had any visual complaints. There were not any relevant symptoms at that time and patient was not describing any clear stress factors. The family history was unremarkable. The patient did not have such complaints as dizziness, tinnitus, or paraesthesia and there was not any pathological finding at the neurological examination. Also there were no abnormal findings in the blood tests, urinalysis, and MR imaging. The Beck depression, Beck anxiety, and SCL-90 scales showed high levels of anxiety and moderate depression. After the assessment of all these data, suspicion was focused on the bupropion as the main cause of the spider images (visual hallucinations). The patient did not accept hospitalization, thus she was followed up periodically. First the dosage of bupropion was decreased to 150 mg and bupropion treatment was stopped completely in a few days. Alprazolam 0.5 mg/day treatment was started to decrease the patient's anxiety. Paroxetine 10 mg/ day was started and increased to 30 mg/day in two weeks. Following the discontinuation of the bupropion, the visual hallucinations disappeared in a few days. The patient came for controls monthly and at the end of the 6th month the symptoms of depression and anxiety had decreased considerably.

Comment: Bupropion has become a popular antidepressant in the treatment of depressive disorders in Turkey and is preferred frequently because of its relatively low incidence of side effects. Nevertheless every kind of side effects including psychotic symptoms that appear during treatment should be assessed carefully.

Key words: Bupropion, hallucination, antidepressant

References:

1. Ascher JA, Cle JO, Colin JN, et al. Bupropion: A review of its mechanism of antideressant activity. J Clin Psychiatry 1995;56:395-401.
2. Englisch S, Inta D, Eer A, Zink M (2010) Bupropion for depression in schizophrenia. Clin Neuropharmacol; 33(5): 257-259.
3. Hurt RD, Sachs DPL, Glover ED, Offord KP, Johnston JA, Dale LC, et al. A comparison of sustained release bupropion and placebo. N Engl J Med 1997;337:1195-1202.

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Clinical features of patients with panic disorder in outpatient clinics of a psychiatric training and research hospital

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Objective: Panic disorder is a disorder characterized by recurrent unexpected panic attacks where the patient may exhibit avoidance

behavior by experiencing anticipatory anxiety for further attacks. According to the DSM-IV-TR, panic disorders are divided into two types: with and without agoraphobia. Agoraphobia is an anxiety disorder in which there are repeated attacks of intense fear and anxiety, and a fear of being in places where escape might be difficult, or where help might not be available, and it results in obvious avoidance of feared places and situations. Panic attack is characterized by intense anxiety that occurs unexpectedly and spontaneously, accompanied by somatic and cognitive symptoms. A marked deterioration can be observed in patients' functions, particularly due to the anticipatory anxiety and avoidance behaviors (1,2). The cognitive rationale of panic disorder is linked to a catastrophic interpretation of bodily sensations. Negative and anxiety-related processes of thought such as heart attack, cerebral hemorrhage, and loss of control are effective in the origin of panic attacks due to a catastrophic interpretation (3). The objective of our study was to identify clinical characteristics involved in the onset and maintenance of this disorder in patients who presented to a training and research hospital.

Method: The study included 101 consecutive patients with panic disorder who presented to the clinics at the Bakirköy Hospital for Mental and Neurological Disorders, met the inclusion criteria, volunteered to participate in the study, and provided informed consent. The diagnosis was made by two psychiatrists, who were not involved in the study. The diagnosis was confirmed using the Structured Clinical Interview Form for the DSM-IV Axis I Disorders (SCID-I). The patients filled in a sociodemographic form, which examined clinical characteristics of the disease in detail, including the identifiable life events triggering the disease and the environmental conditions where the attacks developed, taking the SCID-I clinical interview guide into consideration.

Results: The mean age of participants was 36.73 ± 9.42 years (min: 19, max: 58 years). The mean age of onset was 29.94 ± 9.17 years, and the mean duration of disease was 6.73 ± 7.65 years. The sociodemographic characteristics of the participants are outlined in Table 1. Distribution of the complaints listed in accordance with the DSM-IV-TR panic disorder criteria by their incidence is provided in Table 2 (only the first 3 criteria among the DSM-IV-TR panic disorder criteria were included in the assessments). The clinical characteristics of patients specific to panic disorder are shown in Table 3.

Discussion: Understanding the clinical characteristics specific to panic disorder, which have a significant impact on the functioning of a person due to escape, avoidance, and safety seeking behaviors as a result of a catastrophic interpretation of bodily sensations, is important in conceptualization and therapeutic interventions of the disorder.

In the present study, the population was not well reflected in terms of gender as participants were consecutively enrolled from the clinics of a training and research hospital. It was a single-center study, and Axis I and II comorbidities were not evaluated. We believe that further studies eliminating such limitations would be beneficial.

Key words: Panic disorder, panic symptoms, avoiding behavior

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Effect of calcium in treatment of premenstrual syndrome

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Purpose: The occurrence of menses is a natural and biological event, which is experienced by half of the human race for about 30 years of life. This natural phenomenon is often surrounded by vagary, delusions, and negative views, and for some women menses means disorder, wound or mental and physical impurity. This feeling is matched with premenstrual stress and its destructive complications overshadow the lives of these women. This syndrome as an unsolvable problem lasting during a significant portion of human life and causes family problems, misbehaviour with children, problems at work, or absences from work. All of these consequences have caused the public media to pay much attention to this syndrome in recent years. The purpose of this study was to determine the effect of calcium in the treatment of premenstrual syndrome.

Method: This study was done using a semi-experimental method, among all of medical students at the Medical School of Mazandaran, who filled in the questionnaire to diagnose this syndrome (Rosignol Bonlender Questionnaire) during a period of 3 months. This questionnaire included demographic information, entrance and omission criteria, check paper, and a symptom list of Rosignol Bolender. A total of 200 girls who suffered from the moderate or severe form of this syndrome were selected randomly and divided in two groups. The first group (100 girls) took 100 mg /day of calcium for 7 days at the end of their cycle and the second group (100 girls) took placebo for 7 days at the end of their cycle. The duration of the treatment was 3 months. After the treatment, the severity of physical and mental symptoms was compared. Also the comparison after the intervention was done in two groups.

Results: Based on the independent sample test, these two groups were homogeneous with respect to age ($p = 0.233$, based on independent sample test), education level ($p = 0.328$, based on x2 tests , length of menstrual cycle ($p = 0.245$), based on independent

sample test), severity of physical symptoms before intervention (p = 0.141), severity of mental symptoms before the intervention (p = 0.132), severity of physical and mental symptoms altogether before the intervention (p = 0.144). In the first group there was a meaningful difference between the severity of physical (p= 0.000), mental (p= 0.000) and physical & mental symptoms combined (p= 0.000) between before and after the intervention measurements. The reduction in severity of physical, mental, and physical and mental symptoms altogether after the intervention were meaningful between the two groups (p= 0.000).

Conclusion: Based on our results calcium may improve the symptoms of premenstrual syndrome.

Key words: Premenstrual syndrome, calcium, placebo, physical symptoms, mental symptoms

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Eye movement desensitization and reprocessing (EMDR) treatment in a patient with post-traumatic stress disorder: A case report

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Post-traumatic stress disorder (PTSD) is a psychiatric disorder that is characterized by autonomic, dysphoric, and cognitive signs together with affective numbing and distressed re-experiencing and avoidance of previous traumatic events in a person who has encountered, lived, or heard an excessively traumatic event.

EMDR is a psychological method, which has proven to be effective bringing together elements of well-established approaches such as psychodynamic, cognitive, behavioral, and client-centered approaches.

In recent years, there has been an interest in using the EMDR (Eye Movement Desensitization and Reprocessing) therapy. One of the reasons for this interest may be its effectiveness shown by numerous studies, especially, conducted with individuals who suffer from Post -Traumatic Stress Disorder (PTSD). EMDR is known to be an innovative approach that accelerates information processing and facilitates the integration of fragmented traumatic memories. This process is stated to allow better integration of the information that a person has to handle in the future. Recent practice guidelines and meta-analyses have designated EMDR as a first-line treatment for trauma. Although the prevalence of trauma and trauma related disorders is high in Turkey, there have been a limited number of published studies highlighting treatment options (6-8). Given the effectiveness of EMDR regarding trauma and related disorders, the utilization of the technique by a broad number of mental health professionals may not only increase the professionals' competency in treatment of these disorders, but also may provide patients suffering from the mentioned disorders a chance to recover in a relatively short period of time.

In this paper, the treatment process with Eye Movement Desensitization and Reprocessing (EMDR) of a case, who showed signs of post-traumatic stress disorder after a car accident and the need to use this effective method by clinicians more frequently and broadly in post-traumatic stress disorder patients will be discussed.

Key words: Eye movement desensitization and reprocessing, therapy, trauma, post-traumatic stress disorder (PTSD)

References:

1. Sadock BJ, Sadock VA. Kaplan & Sadocks's Synopsis of Psychiatry: Behavioral Sciences, Clinical Psychiatry. Ninth ed., Philadelphia, Lippincott Williams & Wilkins,2003 p.623-31.
2. Amerikan Psikiyatri Birliği. Psikiyatride Hastalıkların Tanımlanması ve Sınıflandırılması El Kitabı. Yeniden gözden geçirilmiş dördüncü baskı (DSM-IV-TR),Washington DC, Amerikan Psikiyatri Birliği, 2000'den çeviren E Köroğlu, Ankara, Hekimler Yayın Birliği, 2001.
3. Shapiro, F., Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols and Procedures, 2nd Edition, Guilford Press,Newyork, 2001.
4. Bisson J, Andrew M. Psychological treatment of post-traumatic stres disorder(PTSD). Cochrane Database Syst Rev 2007;18(3):CD003388.
5. Seidler GH, Wagner FE. Comparing the efficacy of EMDR and trauma-focused cognitive-behavioral therapy in the treatment of PTSD: a meya-analytic study. Psychol Med 2006;36(11):1515-22.
6. Kavakcı Ö, Doğan O, Kuğu N. EMDR (eye movement desensitization and reprocessing): a different option in psychotherapy. Düşünen Adam The Journal of Psiychiatry and Neurological Sciences 2010;23(3):195-205.
7. Hocaoğlu Ç, Sağlam D. Post-traumatic Stress Disorder in the Elderly: A Case Report. Klinik Psikiyatri 2007;10:223-27.
8. Kavakçı Ö, Yıldırım O, Kuğu N. EMDR for Post Travmatic Stress Disorder and Test Anxiety: A Case Report Klinik Psikiyatri 2010;13:42-47.

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Cabergoline induced manic episode: A case report

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Cabergoline is an orally administered synthetic dopamine agonist, which is used for the treatment of hyperprolactinemia, Parkinson Disease, and antipsychotic-induced prolactin elevation.
One major characteristic of cabergoline is its long duration of effect. It is highly effective in suppressing prolactin levels up to 21 days after a single 1 mg oral dose. The prolonged elimination half-life offers an advantage of once daily dosing but it might be a handicap in terms of wash-out of adverse effects like psychosis.
Cabergoline has been associated with adverse reactions consistent with other dopaminergic agonists including cardiovascular, gastrointestinal, and neuropsychiatric effects. It is known that dopaminergic treatment is a remarkable risk factor for psychosis. A number of reports implicate dopamine agonists in the development of psychosis. But there is no report in the literature on dopamine agonist-induced mania. In this case, we report the first manic episode occurring after cabergoline use for hyperprolactinemia treatment. In susceptible individuals, cabergoline can cause manic episodes and cabergoline should be used more carefully considering the risk-benefit ratio.
Key words: Cabergoline, manic episode, bipolar disorder, dopamine agonists, hyperprolactinemia

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Substance use and eating patterns of female adolescent students

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Introduction: The problems of smoking and/or drinking among female adolescents come to the front as a serious social problem, as the rate of occurrence of these behaviors among female adolescents is on the increase. Substance use disorders and eating disorders frequently co-occur in the presence of other psychiatric disorders. Although this co-occurrence suggests the possibility of shared factors in the etiology of these two problems, research to date has not established such links. Regardless of the meaning of the association, the reality that substance use disorders and eating disorders frequently co-occur has important implications for assessment, treatment, and future research, especially for female adolescents.
Objectives: The first objective of this research was to estimate the rates of smoking and drinking problems among female adolescent students and the second was to examine their association with psychopathologies and eating behaviors.
Methods: We surveyed 861 female adolescents, 405 students in the 8th grade of one middle school and 456 students in the 10th grade from two high schools in Wonju, South Korea. Each student completed a questionnaire that consisted of demographic data, parental monitoring, her attitude toward her parents (CATP), her own attitude toward alcohol, tobacco, and foods, BMI, and the difference between perceived and ideal body images (DoBI). The TFEQ (Three Factor Eating Questionnaire) for eating patterns and the self-report version of SDQ (Strengths and Difficulties Questionnaire-self report) for psychopathology were also administered.
Results: 1) For the 8th graders, the prevalence of smoking and drinking were 8.6% and 18.4%, respectively. These prevalences were 14% and 48.3% correspondingly in the 10th graders (Table 1). 2) Female adolescents with smoking and/or drinking habits, except for the 10th graders with smoking, showed inattention-hyperactivity and conduct problems more frequently than the students without substance use habits. 3) The 10th graders who reported drinking had eating patterns characterized by dietary restraints, and the 8th graders with drinking problems showed disinhibition of eating patterns (Table 2). 4) The female adolescents with a high score in the difference between perceived and ideal body image showed inattention-hyperactivity and emotional problems more frequently (Table 3).
Conclusions: From these results, we suggest that middle-school girls may start smoking to reduce their weight. The lower the disinhibition score is, the higher the risk of smoking and drinking. For the high-school girls, the lower the dietary restraint score is, the higher the risk of drinking. In conclusion, smoking and drinking behaviors are closely related to externalizing problems such as inattention-hyperactivity

and conduct problems and eating behavior is mainly related to drinking rather than smoking. The association of eating behavior and drinking is likely correlated through the medium of various psychopathologies.
Key words: Substance use, eating pattern, psychopathology, female adolescents.

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Neuroleptic malignant syndrome: A case report

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Summary: Neuroleptic Malignant Syndrome (NMS) is a state, which commonly presents with autonomic changes like fever exceeding 40 degrees Celsius, muscle rigidity, changes in mental status, tachypnea, and fluctuations in blood pressure. It occurs mostly due to classical antipsychotic drugs with high potency. However, atypical antipsychotic drugs, such as fluoxetine, reserpine and phenothiazine-like antiemetics, can also cause NMS. We present a case of a 38 year-old patient with chronic schizophrenia, who developed NMS after ingestion of the intramuscular form of zuclopenthixol acetate 50 mg/ml twice, two days apart.
Case: A 38 year-old, single, male patient with a diagnosis of chronic schizophrenia for 18 years. While being followed up with clozapine 300 mg/d, amisulpride 200 mg/d for the last 6 months, upon oral administration of zuclopenthixol acetate 50 mg/ml (im) twice, two days apart, by his family for an acute psychotic flare, he presented to the emergency room with sweating, progressive dysphagia, refusal of food intake, hypersalivation, slowing of speech, dysuria, and muscle cramps. On examination, his body temperature was 39.3 degrees Celsius, heart rate was 110 bpm, blood pressure was 120/70 mm-Hg, and the patient was tachypneic (32/min). There were no pathological findings apart from urinary incontinence. On laboratory work-up: WBC=12700/mm^3, CPK=3226 U/l, urea=74 mg/dl, creatinine=1.4 mg/dl, Fe=19 U/dl. On follow up, a mild to moderate increase in leukocytosis was seen. For hydration, 2000 cc IV fluid was given as a replacement with regards to his urinary output. All antipsychotic drugs were stopped. He was put on lorazepam 1 mg/dl because of agitation. On follow up, his leukocyte count went back to normal, CPK level was down from 3226 to 102 consecutively. Urea and creatinine levels were 20 mg/dl and 1.4 mg/dl, respectively. His oral intake returned to normal in 5 days; fluid replacement was continued for 3 more days. His rigidity was still present but to a lesser extent and after 10 days the patient was discharged with clinical recovery.
Conclusion: NMS is often seen within 10 days following antipsychotic use; however, regardless of dose and duration of usage, it can be seen at any stage of therapy. There are no cases reported in the literature like ours on oral ingestion of the intramuscular form of an antipsychotic drug. We believe that as the number of case reports on NMS increase, this issue will be better understood.
Key words: Neuroleptic malignant syndrome, chronic schizophrenia, zuclopenthixol acetate.

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Treatment of clozapine induced obsessive compulsive behavior in a schizophrenic patient with valproic acid augmentation: A case report

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Introduction: The comorbidity of obsessive-compulsive disorders (OCD) and schizophrenia has been documented by epidemiological investigations. Within the multiple pathogenetic factors leading to OCD in schizophrenic patients, treatment with atypical antipsychotics has been proposed for a significant subgroup of these patients. Herein, we report the case of a schizophrenic patient who developed clozapine-induced obsessive compulsive symptoms that responded to valproic acid augmentation.
Case Report: A 51-year-old male patient first developed paranoid delusions and auditory and visual hallucinations at the age of 23,

fulfilling the diagnostic criteria of the DSM-IV for schizophrenia. He had been hospitalized several times and underwent various treatment regimens (including electroconvulsive therapy) in the past for acute schizophrenic episodes. He had been in remission with clozapine 500 mg/day for approximately one year before relapse occurred as a result of treatment noncompliance. He was admitted to hospital with exacerbation of positive symptoms. He was started on clozapine 50 mg/day and titrated up to 500 mg/day. A significant improvement was observed in positive symptoms. However, he developed compulsive hand washing behavior in the 3rd week of the treatment. He had been spending 5 to 8 hours a day washing his hands although he recognized that it was senseless. He did not have a history of obsessive-compulsive disorder. We assumed clozapine-induced obsessive compulsive symptoms and gradually decreased the dosage of clozapine which resulted in aggravation of positive symptoms and elevated mood. Therefore, valproic acid 1000 mg/day was added to the regimen of clozapine 500 mg/day. Two weeks after starting valproic acid, the patient`s positive symptoms and elevated mood were significantly reduced and his compulsive hand-washing disappeared. He was discharged and in a 3 month-follow-up, he was maintained well under a combined treatment with clozapine and valproic acid.

Discussion: Our patient developed hand-washing compulsion during treatment with clozapine,an atypical antipsychotic, which disappeared after augmentation of valproic acid. Although a few case reports have mentioned the efficacy of valproic acid in the treatment of OCD, there is only one case report showing alleviation of clozapine-induced OCD symptoms with valproic acid augmentation in a patient with schizophrenia. In light of our case report, we suggest that valproic acid may be a choice when treating OCD symptoms which may appear as an adverse effect of atypical antipsychotics in patients with schizophrenia. Case-controlled studies are required to establish the efficacy of valproic acid in the treatment of antipsychotic-induced OCD symptoms before definitive conclusions can be reached.

Key words: Clozapine, obsessive compulsive behavior, schizophrenia, valproic acid, augmentation

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Treatment of bipolar disorder in adolescents: A case report

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Bipolar disorder in adolescents is a chronic and recurrent psychiatric disorder with significant short-term and long-term morbidity. Bipolar disorder can occur with different clinical manifestations in the adolescent stage compared to the adult form and usually results in a wrong diagnosis. Mixed and rapid cycling type mania can be seen more frequently in adolescents than adults. This disorder often results in poor academic and social-family performance, legal problems, and increased risk of suicide. For these reasons, it should be treated in a timely and effective manner. However, information on the treatment of bipolar disorder in children and adolescents is limited. We discussed prospective studies with more reliable methods that have been published in the last 10 years. With the recent indication of risperidone, aripiprazole, quetiapine and olanzapine for treatment of bipolar disorders in children and adolescents, the atypical antipsychotics are rapidly becoming a first-line treatment option. The effectiveness of lithium and other mood-stabilizing drug are also supported in monotherapy and combination treatment. Studies concerning the pharmacological treatment of bipolar disorders in adolescents have commonly focused on the treatment of manic episodes, and very few data are available regarding the treatment of bipolar depression, maintenance treatments, and comorbid diseases. Also, further studies examining the safety, efficacy, tolerability and neurobiological effects of psychotropic medications in children and adolescents with or at familial risk for developing bipolar disorder are needed. In this case report, we will review clinical manifestations, differential diagnosis, and current treatment approaches of bipolar mood disorder. To this end, we will present and discuss the case, and the relevant literature, of a 16 year old female inpatient, who has received treatment at our clinic, has had a bipolar mood disorder diagnosis for 2 years and has been taking an atypical antipsychotic medication with lithium.

Key words: Bipolar disorder, treatment, adolescents

References:

1. Kılınçaslan A, Savaş HA. Çocuk ve Ergenlerde İki Uçlu Bozukluğun İlaçla Tedavisinde Yeni Gelişmeler Güncel Psikiyatri ve Psikonörofarmakoloji 2011;1(1):24-36.
2. Taylor E. Managing bipolar disorders in children and adolescents. Nat Rev Neurol 2009;5(9):484-91.
3. Sayar K, Öztürk M, Özer AÖ. Üç Olgu Nedeniyle Ergenlik Döneminde Bipolar Bozukluk Van Tıp Dergisi, 2000; 7(2):66-77.

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Leukopenia and neutropenia due to venlafaxine use: A case report

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Background: Neutropenia is a serious side effect of psychopharmacological treatment. Neutropenia is defined as less than 0.5 x 109/L mature neutrophil cells. Patients with such severe acute neutropenia are likely to experience life-threatening and sometimes fatal infections. This report includes a case, who developed leukopenia and neutropenia due to venlafaxine use and a review of the relevant literature.
Case: A 27 year-old, married female patient, who had a history of major depression and used venlafaxine 75mg/day for 6 months 5 years ago. The patient reported a significant decrease in psychiatric symptoms and no side effects due to the treatment in this period. The patient reported that the symptom remission had been sustained for 4 years. She reported that complaints including anxiety, palpitation, dyspnea, paresthesia, and fear of death started recently following a psychosocial stress. A psychiatrist prescribed venlafaxine 75mg/day with a diagnosis of panic disorder. After one month a complete blood count test was performed because the patient complained of fatigue. It indicated neutropenia and leukopenia (neutrophil count, 1.2K/uL; leukocyte count, 3.26K/uL). The same test was repeated after 2 weeks and it indicated a progression in severity of neutropenia and leukopenia (neutrophil count, 0.37K/uL; leucocyte count,2.38K/uL). She had no other concerning pharmacological agent. Because medical evaluations found no other medical problem associated with neutropenia, venlafaxine was stopped. Two weeks later, the neutrophil count was 2.54K/uL and the leukocyte count was 4.77K/uL. The patient's hematological table recovered within one month.
Conclusion: Neutropenia and leukopenia have never been reported during treatment with venlafaxine. A case presentation of neutropenia is reported with combined treatment of mianserin and venlafaxine. When neutropenia and/or leukopenia develop during a drug treatment the drug should be stopped immediately. Blood cell counts can return to normal after stopping the drug. In our case blood cell counts were completely normal in 2 weeks after stopping venlafaxine. It is important to consider routine blood tests in psychopharmacological treatments.
Key words: Leukopenia, neutropenia, side effect, venlafaxine

References:

1. Anghelescu I, Klawe C, Dahmen N. Venlafaxine in a patient with idiopathic leukopenia and mirtazapine-induced severe neutropenia. J Clin Psychiatry 2002; 63(9):838.
2. Andrès E, Maloisel F. Idiosyncratic drug-induced agranulocytosis or acute neutropenia. Curr Opin Hematol 2008; 15(1):15-21.
3. Lucht MJ, Kleinschmidt R, Maier W, Rietschel M. Agranulocytosis during treatment with mianserin and venlafaxine. J Clin Psychopharmacol 2000; 20(4):490-1.

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[PP-011] Ref. No: 138

EMDR treatment for a sexual rape victim: A case report

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Almost anyone who has had a traumatic experience might show intense stress symptoms. It is possible to see post-traumatic stress symptoms especially among people who have been raped. Recently, efforts to provide counseling for rape victims have become common. The EMDR treatment focuses on the sensorial units of the memory (emotional, cognitive, and physical) to reach the disturbing events, accelerate functions, and improve the learning process. It is thought that EMDR treatment relieves post-traumatic stress symptoms for rape victims. In this case 90 minute EMDR sessions were applied. The Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), State and Trait Anxiety Inventory-I (STAI-I), and Impact of Events Scale- Revision (IES-R) were completed before and after treatment and 1 month later in a follow up session. It was observed that the stress symptoms of the patient decreased shortly after the EMDR treatment and 1 month later in the follow up session. Although the study was conducted with one individual, in patients with sexual trauma, the EMDR application might be beneficial.
Key words: Trauma, rape, EMDR

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Influence of family and education factors on the inclination to commit crimes in Soviet times and today

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Objective: The objectives of the research were to study the influence of education level and some family factors (alcohol addiction of parents, upbringing in a one-parent family) on the inclination to commit criminal offences in the examined individuals in Soviet times in comparison to the current situation. Material and methods: 35 reports of the Commission of forensic psychiatric experts over the period of January - March 2010 (the examined individuals of group 1) and 35 archive acts of outpatient forensic psychiatric examination that covered the period of January-March 1991 (the examined individuals of group 2) were analyzed. In total 70 men aged between 15 and 75 were considered. The statistic method, comparative analysis, in combination with the data on the somatoneurological state and the data of an experimental psychological study were applied.
Results: The study found out that 20 patients of group 1 were held criminally responsible under article 131 of the RF Criminal Code (CC), 13 under article 132 of the RF CC, and 2 individuals were held criminally responsible under article 135 of the RF CC. Out of total 20 patients, 14 had received incomplete secondary education, 7 did not receive any education at all, 6 individuals received full secondary education, 4 incomplete secondary vocational education, 4 higher vocational education, and 1 patient received education in the form of 8 years of special school. The family history data showed that 10 patients were brought up in the family in which either 1 or both parents abused alcohol, 9 individuals were raised and developed in a one-parent family, 8 individuals did not have parents at all, and only 8 out of the 35 patients of group 1 were brought up in secure families. The 35 patients of group 2 included 9 individuals that were held criminally responsible under article 144 of the RSFSR CC, 5 under article 108 of the RSFSR CC, 4 under each of articles 103, 145 of the RSFSR CC, 2 under each of articles 117, 206, 246 of the RSFSR CC, 1 under each of articles 89, 102, 120, 148, 188, 212, 224 of the RSFSR CC. In group 2 there were 15 individuals with incomplete secondary education, 13 with incomplete secondary vocational education, 5 with full secondary education and 2 with full secondary vocational education. The family history data showed that 18 patients from group 2 were brought up in the family where either one or both parents abused alcohol, 28 were raised in a two-parent secure family and 7 individuals were raised in a one-parent family.
Conclusion: The study demonstrated a clear relationship between the education level and some family factors affecting the inclination to commit criminal offences. Now the number of criminal offenses against the person that are committed by uneducated individuals has increased, as well as crimes committed by those who have higher vocational education, while the number of secure families has decreased, which in turn has exacerbated the criminal situation in the country.
Key words: Education factors, Soviet times, forensic psychiatric examination

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[PP-013] Ref. No: 108

Survey of referral pathways to a crisis team

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Introduction: Crisis Teams are well established in many trusts in the departments of psychiatry around the UK. The crisis team based at Pilgrim Hospital, Boston receives 1300 referrals per year approximately. Not only is it important to know what the sources of referrals to a crisis team are, but it is helpful to survey where the patients are discharged to at the time when a case is closed by the crisis team. This information will have implications in terms of service provision, as well as targeting potential sources of referrals in terms of psycho-education of not only service users, but also of referring agencies at different tiers of mental health services, from a general practitioner to a care provider in the community.
Objectives and Methods: To ascertain sources of referrals to a crisis team and the destination to which service users were discharged at the time of closure of a case by the crisis team.
Results and Conclusion: N = 92 records of service users were randomly selected. They all completed their journey through the crisis team

from triage to discharge.
Key words: Crisis team, referral pathways, community care

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[PP-014

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Fluanxol and haloperidol efficacy evaluation in treatment of schizophrenic patients

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Objective: The purpose of the research was to study the efficacy of Fluanxol in the treatment of schizophrenic patients compared with haloperidol.
Method: Research subjects were 23 paroxysmal progredient schizophrenia patients, who were stationary examined. There were 18 men and 5 women among them, 6 patients of 16 to 20 years of age and 17 patients aged between 20 to 40 years.
A clinical-psychopathological research method with a psychopharmacological approach was used.
Results: Three groups of patients were picked out. The first group of 9 patients included patients with an acute and subacute exacerbation, Kandinski-Klerambo syndrome, acute sensitive delusions of grandeur, of influence, of persecution with imperative pseudo hallucinations, and open thought symptoms.
The second group of 4 cases included patients with paraphrenia acute exacerbations, expansive delusions, and auditory pseudo hallucinations with oneric inclusions.
In both groups the therapy began with traditional neuroleptics. Haloperidol depot 5 mg was prescribed intramuscularly once every 2 weeks, but haloperidol intravenously from 5 to 10 mg a day. During 7-10 days of treatment, productive psychotic symptoms were reduced only through intensity in order to change preparation closed to atypical antipsychotic drug. So Fluanxol depot from 10-20 mg was prescribed intramuscularly once every 2 weeks and at the same time patients took it from 3 to 10 mg twice a day inside. During Fluanxol therapy, psychotic symptoms were reduced after 5-7 days of treatment.
The third group of 10 people included less progredient schizophrenia patients with neurosis-like negative symptomatology. Haloperidol from, 1.5 to 5 mg a day inside for 3-4 weeks of treatment, didn't have a positive effect on the negative symptoms. Fluanxol, from 1 to 3 mg twice a day inside for 7-12 days of treatment, caused a decrease in intensity or a complete reduction in negative symptomatology, so as mimics, mood, emotions were improved. This Fluanxol effect was shown by the two first groups having negative symptoms. Most patients took it without any corrector-preparation.
Conclusion: Fluanxol is more effective in the treatment of schizophrenic patients.
In comparison with haloperidol it decreased positive symptomatology more quickly, decreased or completely reduced negative symptoms and only in some cases caused drug side effects.
Key words: Fluanxol, haloperidol, schizophrenia

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[PP-015]

Ref. No: 241

Anorexia nervosa and cannabis abuse: A case report

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Rates of comorbidity are higher in patients with eating disorders and also the number of comorbid disorders is numerous. Most comorbidities associated with eating disorders are mood disorders, anxiety disorders, personality disorders, and substance use disorders. According to past research, there is a high rate of comorbidity of alcohol-substance abuse and eating disorders. Although the majority of studies in this area are focused on the use of alcohol, studies that have identified an association between illegal substance use and eating disorders are also available. In a study in the USA, the use of cannabis with anorexia nervosa (AN) and bulimia nervosa (BN) disorders is reported to be 6-7%. In Turkey, in a study that investigated the comorbidity of eating disorders and substance use, the use of alcohol and cannabis was reported in cases of BN, but the use of psychoactive substances and cannabis was not established in cases of AN. Among

eating disorders, alcohol or drug abuse are most often found in individuals with bulimia nervosa and bulimic behaviors. Also, binge eating/purging anorexics appear to be more likely than restricting anorexics to indulge in substance use. Patients with bulimia nervosa have significantly higher rates of use of amphetamines, barbiturates, marijuana, tranquilizers, and cocaine than patients with anorexia nervosa. Compounds of cannabis like tetrahydrocannabinol activate endogenous cannabinoid receptors (CB1 and CB2) in brain. Stimulating the CB1 receptor is known to cause increased appetite and an antiemetic effect and because of these effects cannabinoids are included in clinical use. In this case report, an anorexia nervosa case, who was a young female patient using cannabis, will be presented. The patient, a 17 year-old, high school student, lived with her family, had complaints of weight loss and had used cannabis for three years. Before beginning to use cannabis her BMI was approximately 22, when referred to our clinic it was 15.6. She indicated that at first cannabis caused increased appetite, but excessive vomiting occurred in the first few months and then she started to exercise excessively. Although she noticed losing weight in this way, she did not stop the use of cannabis. According to a review of the literature in Turkey, such a case of cannabis use and anorexia nervosa comorbidity hasn't previously been reported. In this respect, discussion of the case in detail is important.

Key words: Anorexia nervosa, cannabis, substance abuse, eating disorders

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[PP-016] Ref. No: 249

Fluoxetine-induced thrombocytopenia: A case report

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Case: A 44 year old, university graduate, married male with 2 children was diagnosed with a first episode major depressive disorder and no abnormalities were observed in the routine tests, including the total blood count test carried out prior to commencing drug therapy. Afterwards the patient was prescribed fluoxetine and the daily total drug dose was set at 10 mg for the first week of treatment and 20 mg for the following 3 weeks. During the first follow up visit after thirty days, it was observed that the patient had gone into a total remission and no change was made in the pharmacotherapy. However, it was learned that thrombocytopenia was detected in the total blood count test requested by the family doctor because of a suspicion of a urinary tract infection. Since no pathology that could account for the thrombocytopenia that was detected by a hematology expert following standard consultation and further tests, the patient was transferred back to us with a suspicion of fluoxetine induced thrombocytopenia. Fluoxetine was immediately discontinued and replaced with reboxetine and similarly reboxetine was prescribed as 4 mg/day for the first week and as 8 mg/day after the first week. The thrombocytopenia of the patient went into total remission within 7 days and no problem was observed during the total blood count tests for the next 6 months.

Even though the most common side effects of fluoxetine are nausea, nervousness, and insomnia, side effects of the hematological system have also been noted. To this end, there are publications which suggest possible negative effects on the number and function of thrombocytes. It is thought that the mechanism behind these hemostasis related side effects of fluoxetine is the depletion of serotonin stores by preventing the reuptake of serotonin into thrombocytes. Starting from this hypothesis, the presumption is that reboxetine, which is a pure noradrenaline reuptake inhibitor, will have no effect on these processes. In fact, there have been no reports that relate reboxetine with thrombocytopenia and/or thrombocyte functional disorders. However it should be clarified with further studies whether this is purely coincidental or if reboxetine has no effect on serotonergic systems.

Conclusion: Reboxetine may be a good alternative for patients with thrombocytopenia and/or with functional thrombocyte disorders in the treatment of major depressive disorders. However, more research is required in order to reach more certain conclusions.

Key words: Depression, hematological, side effect, switching, reboxetine, fluoxetine, thrombocytopenia

References:

1. Pai VB, Kelly MW. Bruising associated with the use of fluoxetine. Ann Pharmacother 1996; 30(7-8):786-788
2. Mirsal H, Kalyoncu A, Pektaş O. Ecchymosis associated with the use of fluoxetine: case report. Turk Psikiyatri Derg 2002; 13(4):320-324
3. Halperin D, Reber G. Influence of antidepressants on hemostasis. Dialogues Clin Neurosci 2007; 9(1):47-59
4. Lewis G, Mulligan J, Wiles N, Cowen P, Craddock N, Ikeda M, et al. Polymorphism of the 5-HT transporter and response to antidepressants: randomised controlled trial. Br J Psychiatry 2011; 198(6):464-471

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Interethnic differences in UGT1A4 genetic polymorphisms in Mexican and Spanish populations

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Clinical treatment with antiepileptics exhibits large interpatient variability. The UDP-glucuronosyltransferase (UGT) 1A4 is an enzyme responsible for the conjugation of glucuronic acid in diverse functional groups included in various antiepileptic drugs, such as lamotrigine and phenytoin. Several genetic polymorphisms of UGT1A4 have been described in different populations; among them, two non-synonymous single nucleotide polymorphisms (SNPs) 70A>C (P24T; UGT1A4*2) and 142T>G (L48V; UGT1A4*3b), as well as a synonymous variant SNP 471T>C (C157C; UGT1A4*1b). P24T and L48V polymorphisms reduce the glucuronidation activity on various substrates. Recently, it has been shown that L48V polymorphism decreases the serum concentration of lamotrigine in patients on monotherapy or polytherapy, resulting in clinical outcome variability.

The main goal of this study was to determine the allelic frequencies of UGT1A4*1b, UGT1A4*2 and UGT1A4*3b in a sample of Mexican Mestizo (MM) and Spaniard (SP) healthy volunteers. UGT1A4 genotyping is clinically important in order to identify patients who may be at an increased risk for failure of therapy and/or adverse effects to anticonvulsants such as phenytoin and lamotrigine.

In this study, the allelic frequencies of these three UGT1A4 variants were determined by combined methodology of RFLPs and RT-PCR in MM and SP populations. The allelic frequencies of the three UGT1A4 polymorphisms analyzed showed interethnic differences between MM and SP, that was statistically significant for UGT1A4*1b (0.17 and 0.08, respectively; p=0.002).

These data could help clinicians to improve clinical response during treatment with UGT1A4 antiepileptic drug substrates in these populations.

Key words: Interethnic differences, UGT1A4, genetic polymorphism.

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Influence of CYP2C9 genetic polymorphism on losartan oxidation in an Ecuadorian population

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Background: Cytochrome P450 2C9 (CYP2C9) is a polymorphic enzyme catalyzing the metabolism of several important drugs. CYP2C9 metabolizes a number of therapeutically important drugs, including most nonsteroidal anti-inflammatory drugs, S-warfarin, phenytoin, and losartan. CYP2C9 is also involved in the metabolism of several important psychoactive substances (tetrahydrocannabinol, fluoxetine, amitriptyline, phenytoin, etc.). It has been reported that CYP2C9 activity is modulated by endogenous substrates such as adrenaline and serotonin. The involvement of CYP2C9 in the metabolism of melatonin has also been suggested.

Losartan has recently been suggested as a selective probe for CYP2C9 metabolic activity.

Objective: The aim of the study was to determine the activity of CYP2C9, using losartan as a probe drug, in relation to CYP2C9 genotype in healthy Ecuadorian subjects.

Methods: A single oral dose of 50 mg losartan was given to 194 Ecuadorian unrelated subjects. Concentrations of losartan and its carboxylic acid metabolite, E3174, were analyzed by means of high-performance liquid chromatography in urine collected for 8 h. The CYP2C9 genotypes were determined in 194 subjects using specific methods for CYP2C9*2 and CYP2C9*3.

Results: The frequencies of the allelic variants CYP2C9*2 and CYP2C9*3 were 0.054 and 0.015, respectively. The urinary losartan/E3174 ratio was significantly higher (p=0.027) in subjects with the CYP2C9*1/*3 genotype (mean±SD, 12.4±13.8; n=6) than in subjects with the CYP2C9*1/*1 (4.9±7.0; n=167).

Conclusion: This is the first most extensive population where losartan has been used as a probe drug to evaluate the CYP2C9 activity in vivo. The urinary losartan to E3174 metabolic ratio after a 50mg losartan dose was found to be a safe and useful phenotyping assay for CYP2C9 activity in vivo. The CYP2C9*3 variant allele is a major determinant of the enzyme activity, and it decreases losartan metabolism significantly, while the CYP2C9*2 allele has less impact on enzyme function.

Key words: Cytochrome P450 2C9, genetic polymorphism, losartan, ecuadorian population

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[PP-019] Ref. No: 194

Efficacy of progressive muscle relaxation training on anxiety, depression and quality of life in cancer patients under chemotherapy

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Introduction: Chemotherapy is one of the common treatment methods for cancer. However, many side effects can be seen among patients and some of them are very serious and painful. Alopecia, anorexia, vomiting, pain in the limbs, headache, and backache are some unwanted effects. On the other hand many patients suffer from psychiatric disorders especially anxiety and depression probably due to the drugs or coping with the disease state. These disorders can cause some problems in the treatment process and the Quality of life. Patients with anxiety and depression can be treated with drugs or psychotherapy.

Progressive Muscle Relaxation [PMR] training is a cost effective self-help method promoting mental health in healthy participants.

The aim of this study was to determine anxiety, depression, and quality of life dimensions of cancer patients undergoing chemotherapy and the effect of progressive muscle relaxation training in improving their mental health and quality of life.

Materials and Methods: This research was designed as a randomized clinical trial. Sixty cancer inpatients undergoing chemotherapy in the Tabriz Hematology & Oncology ward in 2009 were randomly selected and divided into two groups, intervention or control. All participants provided a written formal consent.

Anxiety, depression, and quality of life dimensions were determined with HADS and EORTC QLQ-C30 questionnaires. SPSS 16 software was employed for the data analysis.

After completion of the 1st questionnaires by all participants, the case group was trained in progressive muscle relaxation in 3-6 person groups, with the aim of doing it by themselves in the hospital and after discharge 2-3 times a day. At 2 weeks and one and three months after the intervention, questionnaires were completed again by both groups, and the results were compared.

Results: After initial data analysis almost all of the participants were satisfied with the learning and the experience of this technique.

There was no significant difference between the scores of the case and control groups after PMR after 2 weeks and 1 month ($p > 0.05$). However, after 3 months, anxiety, depression and quality of life dimensions were significantly improved ($p < 0.05$).

Discussion and Conclusion: Almost always side effects of chemotherapy were so terrible that participants could not benefit from PMR in the first weeks.

However, after a decrease in the side effects of the chemotherapy and by practicing more and doing PMR better, this technique improved anxiety, depression, and quality of life in patients with cancer.

Key words: Anxiety, depression, quality of life, chemotherapy, progressive muscle relaxation

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[PP-020] Ref. No: 127

Anxiety reducing effects of oxytocin on the basolateral amygdala by using an electrophysiological method

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Objective: It has been shown by behavioral studies that oxytocin has anxiolytic effects and that oxytocin in nasal spray form suppresses amygdala activity, which is powered by anxiety as demonstrated in functional MRI studies in humans. The amygdala is a part of the limbic system and is activated in case of fear and anxiety. This study evaluated the effects of oxytocin on the basolateral amygdala using a spontaneous EEG.
Material and Methods: The experiments performed in this study have been carried out according to the rules in the Guide for the Care and Use of Laboratory Animals adopted by National Institutes of Health (U.S.A) and have received consent from Ege University Animal Ethics Committee.
The rats were maintained under controlled environmental conditions throughout the study: 22-24 °C ambient temperature, 12:12 light-dark cycle (light from 7:00-19:00), and standard laboratory food and tap water available ad libitum.
In this study 7 Sprague-Dawley adult male rats were used, which were 8-12 weeks old. Under anesthesia a small hole was drilled. Then by taking the bregma as a reference using the stereotaxic method (coordinates Anteroposterior: - 2.8 mm, Lateral: + 4.8 mm, Ventral: - 8.5 mm) (Paxinos Rat Brain), an exterior insulated bipolar EEG electrode was placed in the basolateral amygdala.
Electrodes were fixed by using a dental acrylic (numerous alloys are used in the making of dental restorations). The rats were anesthetized using ketamine (40 mg/kg) and xylazine (4 mg/kg) intraperitoneally (IP).
Electrodes were placed and 3 days later, while the animals were awake in their cages, spontaneous EEG recordings were taken from the amygdala. Then, 0.9% isotonic NaCl solution was injected intraperitoneally into the rats (n = 7), and the EEG was recorded from the amygdala while they were in their cages.
One day later to the same rats (n=7) oxytocin 10 IU/Kg (Synpitan 5 IU) was given IP, and 5 minutes later the oxytocin EEG records were taken in their own cage.
The system recordings were taken for 20 minutes by a Biopac MP30 amplifier system in the range of the 1-60 Hz band, with 10,000 amplification. During this process Delta 1-4 Hz Theta 4-8 Hz, alpha 8-12 Hz and beta 12-20 Hz waves in the EEG were accepted as the ratio of percentage in PSA (Power Spectral Analyses) methods. We affirmed electrode location histologically following euthanisation.
Results: There was significant ($p<0.05$) diminution in delta frequency (64.4 ± 10.9) in the rats given normal saline than in the spontaneous EEG records (79.5% ± 12.8).
There was a significant ($p<0.05$) increase in delta frequency (76.8 ± 12.5) in rats given oxytocin one day after the normal saline was injected (64.4% ± 10.9)(Figure I)
Conclusion: Anxiety caused by injection of a normal saline solution augmented EEG frequency when compared with resting EEG records. Oxytocin diminished the EEG frequency of rats that had injection anxiety. This results show electrophysiologically that oxytocin is a powerful anxiolytic.
Key words: Amygdala, anxiety, EEG, oxytocin

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[PP-021] Ref. No: 134

Genital mutilation in a patient with schizophrenia: A case report

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Genital mutilation, which is quite rare, is generally seen in young male patients. The presented patient was a 23 year old male who was brought by his brother to our psychiatry hospital from an urology clinic. He had extracted one of his testicles with a knife without any anesthetic and put three cherry seeds inside the injured part, then sewed up the injury. He chewed the extracted testicle and vomited the material when his brother saw what had happen. His life history revealed that the disorder began insidiously in his late adolescence; he

had no treatment up to then, and stayed in prison for three years due to injuring his chief with a knife because of delusions of persecution. Autism, flattening of affect, incoherent speech and bizarre, somatic, nihilistic delusions were found in the psychiatric examination. Flupentixol decanoate 20 mg every 15 days IM, haloperidol 20 mg/day and biperiden 10mg/day were administered first IM then orally. There was no remission even after adding ECT for ten sessions. Then clozapine was begun at 25mg/day and titrated to 500mg/day. He was discharged with symptoms which were much improved by using clozapine 500 mg/day, haloperidol 10 mg/day, biperiden 4mg/day, quetiapine 300 mg/day.

In this paper a schizophrenic patient with testicular mutilation was presented and genital amputation was discussed along with reports in the literature.

Key words: Schizophrenia, testicular mutilation

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[PP-022] Ref. No: 135

Hoarding and mood disorder: A case report

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Hoarding is the excessive acquisition of possessions and failure to use or discard them even if the items are worthless or hazardous. The hoarder may believe that the hoarded items are very valuable, know that the accumulated items are useless, or attach a strong personal value to items. It is not clear whether hoarding is an isolated disorder or rather a symptom of another condition such as obsessive compulsive disorder. Hoarding seems to involve some neurological mechanisms which are detected by brain imaging studies. In this case report a patient with mood disorder whose predominant symptom was hoarding is presented and the status of literature about hoarding is reviewed.

Key words: Hoarding, obsessive compulsive disorder, mood disorder, dementia

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[PP-023] Ref. No: 140

Effect of fish oil on treatment of premenstrual syndrome

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Objective: Women go through many hormonal changes throughout their lives from birth to death and this causes many physical and mental challenges that are directly related to their unique reproduction delicacy. Premenstrual syndrome refers to a cyclic appearance of somatic and psychiatric symptoms in some women. Different theories and hypotheses have been proposed and discussed on this issue. Finding an effective and safe solution for the treatment of PMS has always been under consideration. The purpose of our study was to determine the effect of fish oil on treatment of premenstrual syndrome.

Methods: This study was a double blind randomized placebo controlled trial. All of the medical students at the Medicine School of Mazandaran filled in the Rosignol Bonlender Questionnaire for 3 months. This questionnaire included demographic information, inclusion and exclusion criteria, check paper and the symptom list of Rosignol Bolender. A total of 200 girls suffering from the moderate and severe forms of this syndrome were selected randomly and assigned in two groups. The first group (100 girls) took a 1000 mg /day capsule of fish oil for all days of their cycle and the second group (100 girls) took placebo for all days of their cycle. The duration of this treatment was 3 months. After treatment, the severity of physical, mental, and combined physical-mental symptoms were compared before and after the intervention. Also the comparison after intervention was done in two groups.

Results: Based on this and based on the independent sample test, these two groups were homogeneous from the point of view of age ($p = 0.287$, based on independent sample test), education level ($p = 0.954$, based on x2 tests), length of menstrual cycle ($p = 0.305$), based on independent sample test), severity of physical symptoms before intervention ($p = 0.039$), severity of mental symptoms before

intervention (p = 0.144), severity of combined physical-mental symptoms before intervention (p = 0.242) in the first group. There was a significant difference among the severity of physical (p= 0.000), mental (p= 0.000), combined physical-mental symptoms (p= 0.000) before and after intervention. The reduction in severity of physical, mental, and combined physical-mental symptoms after intervention was significant between the two groups (p= 0.000).

Conclusion: Based on our results 1000mg/day fish oil may reduce the severity of physical, mental, and combined physical-mental symptoms of PMS.

Key words: Premenstrual syndrome, fish oil, placebo, physical symptom, mental symptom

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[PP-024] Ref. No: 145

Improvement of risperidone-induced hyperprolactinemia with the addition of aripiprazole: Case report

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Objective: Hyperprolactinemia is an important side effect of antipsychotic treatment. All typical antipsychotics and some atypical antipsychotics such as risperidone and amisulpiride have been shown to cause marked elevation in serum prolactin levels, whereas most other atypical antipsychotics such as quetiapine, olanzapine, clozapine, ziprasidone, and aripiprazole appear to have little or no effect on serum prolactin levels. Hyperprolactinemia can lead to gynecomastia, galactorrhea, sexual dysfunction, infertility, oligomenorrhea, and amenorrhea. It also reduces the bone mineral density and contributes to osteoporosis in the long term. These important side effects cause patients in remission not to continue treatment.

Case: We report two clinical cases of risperidone-induced hyperprolactinemia and amenorrhea, who with treatment by the partial dopamine agonist aripiprazole, showed prolactin normalization.

Conclusion: Addition of aripiprazole to treatment may be considered as a first option in hyperprolactinemia cases with significant improvement in psychotic symptoms.

Key words: Hyperprolactinemia, amenorrhea, antipsychotic, risperidone, aripiprazole

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[PP-025] Ref. No: 146

Atomoxetine for the treatment of ADHD in young adults with an assessment of associated functional outcomes

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Objectives: ADHD in young adults is associated with significant impairment in multiple functional domains. This trial examined the efficacy of atomoxetine (ATX) in young adults and evaluated improvements in core ADHD symptoms and associated functional outcomes.

Method: Patients aged 18-30 years were randomized to 12 weeks of double-blind treatment with ATX (n=220) or placebo (PBO, n=225). Patients in the atomoxetine treatment arm began treatment with 40 mg/day (dosed 20 mg BID) for a minimum of 7 days followed by

80 mg/day (dosed 40 mg BID) for a minimum of 7 days. At Visit 5, or any visit thereafter, the dose could be increased to the maximum of 100 mg/day (dosed 50 mg BID) depending upon continued ADHD symptoms. One unscheduled dose change was allowed if needed for tolerability or safety. The Conners' Adult ADHD Rating Scale- Investigator Rated, Screening Version Total ADHD Symptoms score (CAARS – Inv:SV) with adult ADHD prompts, assessed core ADHD symptoms and was the primary efficacy measure. The adult ADHD Quality of Life-29 (AAQOL-29) scale evaluated functional outcomes in various life domains. Other assessments included Clinical Global Impression-ADHD-Severity (CGI-ADHD-S), CAARS Self Report (CAARS-S:SV), Patient Global Impression-Improvement (PGI-I), Behavior Rating Inventory of Executive Function-Adult Version Self Report (BRIEF-A), and measures for depression, anxiety, sleepiness, driving behaviors, social adaptation, and substance use. Reported means are least-squares means from last-observation-carried-forward ANCOVA models. A mixed-model repeated measures visit-wise analysis was also conducted.

Results: Significant improvement (mean±SE) after ATX treatment was demonstrated on CAARS-Inv:SV (ATX [-13.6±0.8] vs. PBO [-9.3±0.8], p<.001), AAQOL-29 (ATX [14.8±1.1] vs. PBO [10.6±1.1], p<.001), CGI-ADHD-S (ATX [-1.1±0.1] vs. PBO [-0.7±0.1], p<.001), CAARS-S:SV (ATX [-11.9±0.8] vs. PBO [-7.8±0.7], p<.001), and on most components of BRIEF-A, but not PGI-I. Additional assessments were not significant (p>0.05). The adverse event profile in this study was similar to that observed in other ATX studies.

Conclusion: ATX improved core ADHD symptoms with respect to PBO in young adults. Several functional outcomes and executive functioning measures improved significantly with ATX treatment. ATX was generally well-tolerated.

Key words: ADHD, atomoxetine, efficacy, functional outcomes.

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[PP-026] Ref. No: 136

Role of psychopharmacological intervention in cognitive and psychological recovery in hemorrhagic brain injury

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Cognitive impairment is the most common chronic sequela of brain injury, which can result in more persistent disability than the physical injury. However, there are no medications with an approved indication for treating brain injury related cognitive impairment.

The purpose of this poster is to present a case study of a patient who sustained a severe hemorrhagic brain injury and who subsequently experienced cognitive recovery to an unexpected degree.

Based on all criteria, this patient's prognosis was extremely poor. Initially, he had GCS of 7/15. Upon admission to our facility for rehabilitation, 4 months after injury, he had a Rancho Los Amigos score of II, meaning that he had nonspecific non- purposeful reactions to stimuli.

Despite this, he survived his brain injury in far more than a minimally responsive state and today can reasonably be assigned the highest Rancho Los Amigos score of VIII, meaning that he is able to learn new things and compensate for his problems. He exhibits more flexibility in thinking and realizes that he has a problem in his thinking and memory.

The patient's remarkable recovery can be attributed to the team effort; however, in this presentation I will focus on the psychopharmacological intervention, which played a significant role in the patient's cognitive and psychological recovery.

Key words: Brain injury, cholinesterase inhibitors, antidepressants, cognitive functions.

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[PP-027] Ref. No: 148

Obsessive beliefs in patients with panic disorder

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Objective: A growing emphasis is given to beliefs of a person by cognitive models of anxiety disorders. Consensus ratings indicate that 6 belief domains are likely to be important in OCD. The objective of the present study was to investigate whether or not these belief

domains, considered to be important in OCD patients, are also valid for Panic Disorder.
Method: Our sample group included 101 Panic Disorder group, and 155 healthy volunteers with similar sociodemographic characteristics. The instruments used included the Beck Depression Inventory (BDI), State-Trait Anxiety Inventory (STAI), Panic Agoraphobia Scale (PAS), and Obsessive Beliefs Questionnaire (OBQ-44). Total and sub-scale scores of obsessive beliefs as assessed by the Obsessive Beliefs Questionnaire-44 (OBQ-44) were compared between the groups. Total and sub-scale scores in the panic disorder group were re-evaluated against the state, trait, and depression factors of the State-Trait Anxiety Inventory (STAI). SPSS 18.0 for Windows was used for statistical analysis.
Results: The mean age was 36.73±9.42 years in the patient group, and 34.74±12.46 years in the control group. The State Anxiety Scale total score, Trait Anxiety Scale total score, Beck Depression Inventory total score, OBQ-44 total, and subscale scores in patients with a PAS score of 12 or more were statistically significantly higher compared to the control group ($p<0.01$). No statistically significant difference was observed in the OBQ-44 total and subscale scores in 33 patients with a PAS score of 11 or less. The group with a score of 12 or more, which is the cut-off value in the Turkish version of PAS, had statistically significant higher scores in "perfectionism/intolerance of uncertainity" compared to those with a PAS value of 11 or less. The "inflated responsibility/ overestimation of threat" scores ($p<0.05$), "overimportance of thoughts/controlling thoughts" scores ($p<0.05$) and "OBQ total scores" ($p<0.01$) were statistically significantly higher.
Comparison results for those patients with a PAS score of 12 or more with the control group in obsessive beliefs after the STAI state anxiety level was controlled are shown in Table 1; for those with a PAS score of 12 or more with the control group in obsessive beliefs after the STAI trait anxiety level was controlled are listed in Table 2; and for those with a PAS score of 12 or more with the control group in obsessive beliefs after the STAI depression level was controlled are illustrated in Table 3 as OBQ-44 total and subscale scores.
Discussion: We thought that as obsessive beliefs of panic disorder are present in the active period of the disease, and they disappear during remission, they are likely to be associated with severity of the disease. "Overimportance of thoughts/controlling thoughts" was considered to be a constant feature of panic disorder even when depression and trait anxiety levels of belief domain are controlled. This common feature of OCD and panic disorder should be supported by further studies. It has been also found that depression and trait anxiety contributed to the obsessive beliefs in panic disorder patients.
Key words: OCD, panic disorder, obsessive beliefs

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[PP-028] Ref. No: 151

Erectile dysfunction in patients on methadone maintenance therapy in Malaysia

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Objective: The main objectives of this study were to determine the prevalence of erectile dysfunction (ED) and its predictive factor(s) in male patients on methadone maintenance therapy (MMT) attending the Drug Clinic, Hospital Kuala Lumpur.
Methods: This is a cross-sectional study conducted between October 1 and December 30, 2008. A total of 108 subjects participated in the study. The instruments used include the Structured Clinical Interview for the DSM-IV Axis-I Disorder (SCID-I), Beck Depression Inventory (BDI) and International Index of Erectile Function-15 (IIEF-15).
Results: The mean age of the participants was 44.6 ± 9 years. The rate of ED among men on MMT was 68.5% (mild ED was 36.1 %, mild to moderate was 22.2% and severe ED was 3.7%). There were significant associations between age of respondents ($p=0.002$), concurrent illicit heroin use ($p=0.024$), and age of the respondents' partners ($p=0.039$) with ED. After multivariate analysis, it was found that increased age is the only significant predictor of ED with an adjusted odds ratio of 1.07 (1.02-1.16). The methadone dose and duration of methadone treatment were not significantly associated with ED.
Conclusions: ED was highly prevalent among male patients on MMT. While current practice in dosage and duration of MMT in Malaysia did not have any significant impact on ED, sexual function needs to be routinely assessed in patients on methadone.
Key words: Erectile dysfunction, risk factors, methadone substitution therapy

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[PP-029] Ref. No: 154

Cerebellar contusion presenting with pure psychiatric symptoms and cerebellar cognitive affective syndrome: A case report

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The cerebellum is known to be responsible for posture and motor coordination of the body. Recent studies indicate that the cerebellum has a role in conduction of higher brain functions, such as perception, affect, capacity to analyze, and memory, via neuronal connections between the cerebellum and the other regions of the brain. Schmahmann and Shermann described a new syndrome called "the Cerebellar Cognitive Affective Syndrome" (SCAS) and drew attention on cognitive functions of cerebellum. The syndrome was described in a group of patients who had impairment of executive functions, difficulties with spatial cognition, personality changes, blunt affect and language deficits in addition to primary neurological symptoms. In this case report we present a rare case of cerebellar cognitive affective syndrome presenting with pure psychiatric symptoms,who had a posterior cerebellar lobe lesion due to a contusion at the back of the skull.
Key words: Cerebellar cognitive affective syndrome, cerebellum, cognitive functions

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[PP-030] Ref. No: 226

Self-perception and anger with chest pain without cardiac etiology

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Objective: Physical symptoms are the most common expressions of social problems and emotional inconvenience. This problem is usually medically unexplained in patients with chest pain. 'Chest Pain without Cardiac Etiology' is diagnosed in more than fifty percent of patients with chest pain. Anger and suppressed hostility are important factors the development of somatic symptoms. It is important to point out that somatization in depressive disorders is due to expression of anger while somatization in anxiety is due to anger suppression. It is known that, while patients with chronic pain experience anger, they do not care enough to express it because they are in denial of this situation. The form of anger expression in patients with chronic pain may be effective in the disease process and is one of the subjects to be emphasized. Suppression of intense anger leads to the development of chronic pain and suppressed anger scores are higher than healthy controls. In this study, we compared patients with chest pain without detected cardiac etiology and healthy controls in terms of anger and self perception.
Methods: Twenty five patients were included in the study. They all presented to the cardiology clinic with complaints of chest pain, but did not have any detected cardiac etiology. The healthy control group of 80 persons was organized by matching them with the patients according to their age, gender, and education. The Socio-demographical data collection form, Multidimensional Anger Scale, and Social Comparison Scale were given to both of the groups.
Results: There was no significant difference between the socio-demographic features of the two groups. The non-cardiac chest pain group scored higher on the Social Comparison Scale. The healthy control group scored higher on calm behaviour and nonchalant response. Revenge for the reaction and inward looking responses were significantly higher in the non-cardiac chest pain group.
Conclusions: The non-cardiac chest pain group had more negative perception of self as compared to healthy individuals, further they were found to be more negative in their forms of expressing anger. Repressed anger and hostility are important factors in the development of chronic pain. Work on the relationship between mind and body has been a topic of interest in recent years. Not just how an individual perceives himself, but also how other people perceive and relate to him, probably effects the physiological system of that individual.
Key words: Chest pain without cardiac etiology, self-perception, anger

References:

1. Kirmayer lj, Young A. Culture and somatization: clinical, epidemiological and ethnographic perspectives. Psychosom Med 1998; 60: 420-430.
2. Mayou R. Invited review: atypical chest pain. J Psychosom Res 1989; 33: 393-406.

3. Koh KB. Anger and somatization. J Psychosom Res 2003; 55:113.
4. Sayar K, Bilen A, Arıkan M. Kronik ağrı hastalrında öfke, benlik saygısı ve aleksitimi. Türkiye Klinikleri Psikiyatri 2001; 2: 36-42.
5. Güleç MY, Hocaoğlu Ç, Gökçe M, Sayar K. Anadolu Psikiyatri Derg 2007; 8:14-21.

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[PP-031] Ref. No: 155

Mirtazapine treatment for weight loss and insomnia associated with methylphenidate: A chart review

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Introduction: Stimulants are used as first-line treatment for children with attention deficit hyperactivity disorder (ADHD), and their safety and efficacy are well established. Their most frequent adverse effects are sleep disturbance and decreased appetite which may limit optimal dosing and compliance. The aim of this study was to investigate the efficacy of mirtazapine on OROS methylphenidate (MPH) - induced weight loss and insomnia in children and adolescents with ADHD.
Methods: We reviewed the charts of children and adolescents diagnosed with ADHD and identified 18 individuals prescribed mirtazapine for weight loss and/or insomnia while on OROS – MPH treatment. Of these, 2 discontinued mirtazapine within the first week due to excessive daytime sedation.
Results: Mirtazapine was well tolerated by the remaining 16 subjects and no other side effects were reported. All subjects gained weight during concomitant mirtazapine treatment, with a mean gain of 2.1 kg. Fourteen of 16 children who had reported insomnia on MPH alone noted significant improvements in sleep after initiation of mirtazapine.
Conclusion: In this chart review, mirtazapine was found to be beneficial for weight loss and insomnia associated with MPH treatment in children and adolescents with ADHD.
Key words: Attention-deficit/hyperactivity disorder, children, methylphenidate, mirtazapine, insomnia, weight loss

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[PP-032] Ref. No: 157

Rapid-onset hyponatremia induced by duloxetine in a middle-aged male with depression and somatic symptoms

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Duloxetine is a relatively balanced selective serotonin and noradrenaline reuptake inhibitor. We report a case of hyponatremia induced by duloxetine that developed rapidly after starting the medication in a middle-aged male with multiple somatic symptoms and depression. Two days after discontinuation of duloxetine and management with hypertonic saline as well as fluid restriction, the serum sodium level normalized. The patient had two risk factors for developing hyponatremia, namely severe weight loss and pneumonia. Therefore, when treating patients with depression and somatic symptoms, especially with risk factors for developing hyponatremia, close monitoring for clinical and laboratory evidence of hyponatremia may be essential.
Key words: Duloxetine, hyponatremia, middle-aged male, somatic symptoms, depression

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Gender specific metabolic adverse effects in bipolar patients: A comparison between lithium, quetiapine and olanzapine

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Objective: There is some evidence showing gender based differences in the side effects of atypical antipsychotic drugs. The aim of this study was to determine the differences between lithium, quetiapine and olanzapine with regard to their effects on metabolic variables in bipolar disorder and to assess the findings in terms of gender differences.
Method: Twenty-eight female and 29 male cases diagnosed with bipolar disorder type I according to the DSM-IV, taking lithium or quetiapine or quetiapine+lithium or olanzapine or olanzapine+lithium, were evaluated consecutively. For evaluation, being in a remission period was set as a criterion for these cases. Patient interviews were carried out with SCID-I and SKIP-TURK. Blood samples were taken from the patients in order to determine PRL, blood lipids and HbA1c levels.
Results: Mean age, mean age of onset, number of manic, depressive, and total episodes, functionality, and PRL levels were similar between female and male patients. BMI, HbA1c, cholesterol, triglycerides, LDL and HDL levels are found to be similar between the two groups. Both in female and male patients, no difference was found between the lithium, quetiapine and quetiapine+lithium and the olanzapine and olanzapine+lithium groups in terms of BMI, HbA1c, cholesterol, triglyceride, LDL and HDL levels. The only difference (although not significant) among the three groups was the level of cholesterol in women treated with lithium, which was found to be lower than in the other two groups.
Conclusions: This insignificant difference was found while the clinical properties and PRL levels were similar among the lithium, quetiapine and quetiapine+lithium and the olanzapine and olanzapine+lithium groups. Future studies with a specific focus on this topic are needed in order to have a better understanding of the basic mechanisms of gender differences.
Key words: Gender, metabolic side effect, psychotropics, bipolar disorder

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[PP-034] Ref. No: 161

New model of psychogenic stress-induced depression and antioxidant system of rat brain

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The present article describes results of investigation of lipid peroxidation and antioxidant enzyme activity in the brain cells of laboratory rats, that were subjected to a depression-like state. The above-mentioned state was achieved by means of a new model of depression elaborated by us. The model is based on the application of stressors of psychogenic nature.
Our investigations demonstrated that in the depression-like state activity of lipid peroxidation processes increase, which was confirmed by increase of concentration of its end product – malondialdehyde, both in mitochondrial and cytosolic fractions of brain cells. In response to oxidative stress in mitochondria, activity of antioxidant system –namely the leading intracellular antioxidant superoxide dismutase (SOD) – increased. On the other hand, concentration of another important antioxidant –catalase– decreased. Most probably, the depletion of antioxidative potential of the cell, related to depression, proceeds at various speeds in various enzymatic systems.
Administration of the antidepressant drug –fluoxetine– led to the normalization of intensity of lipid peroxidation and overall activity of antioxidative systems. Thus, if activity of these processes increases, antidepressants cause their down-regulation and in they decrease –antidepressants lead to their up-regulation. As a final result, this leads to normalization of cell functioning.
Key words: Animal model of depression, lipid peroxidation, antidepressants

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[PP-035] Ref. No: 216

Effects of strawberry leaf and celery seed extracts in terlipressin-induced chronic hyponatremia in rats

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Hyponatremia (HN) is associated with mortality and morbidity risks due to development of encephalopathy and neurogenic pulmonary edema. Moreover, its rapid correction carries a high risk of development of the serious cerebral disorder known as osmotic demyelination syndrome (ODS).

In the present study, chronic HN was induced in rats using a single daily administration of terlipressin (TP), a synthetic, long-acting analogue of vasopressin, for 3 days. TP-induced HN was then used to study the possible therapeutic effects of strawberry leaf extract (StrwLE) and celery seed extract (CelrSE), and to compare their effects with that resulting from rapid correction using hypertonic saline (HtNaCl). Serum sodium level, as a marker of HN, was measured following induction and treatment, respectively. The study was extended to investigate changes in locomotor activity, pain reflex and lung function using an activity cage, hot-plate test, and spirometer, respectively. Furthermore, assessment of brain nitric oxide (NO) content, that has been shown to play a role in the pathogenesis of ODS, was carried out.

It was found that TP induced a profound (<115 mmo/l) chronic (>48 h) HN that was coupled by decreased locomotor activity, delayed pain reflex and impaired lung function. Administration of StrwLE resulted in a correction of HN with its subsequent neurological dysfunction without elevation of the brain content of NO; however, it resulted in deterioration of the lung function parameters of hyponatremic rats. These findings suggested that StrwLE is useful for treatment of chronic HN, yet, further investigations are required to study its effect on the lungs.

Key words: Hyponatremia, terlipressin, rats, locomotor activity, pain reflex, lung functions

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[PP-036] Ref. No: 165

Post traumatic stress disorder in patients with spinal cord injury and relevant factors

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Objective: Although spinal cord injury (SCI) was thought to be a fatal case, development of rehabilitation approaches in the early 20th century prolonged survival rates and longevity. Physical and psychological trauma and permanent results of the injury are difficult to cope with. Post traumatic stress disorder rates following SCI range from 10 to 44%. In this study we aimed to assess PTSD frequencies in patients with SPI in Turkey and the association of PTSD to factors like depression, anxiety and caregiver burden.

Methods: Eighty four patients with SCI (mean age= 40.5±15.97; 40 female, 44 male) and caregivers (n=83; mean age=43.72±14.37; 67 female, 16 male) were enrolled. Patients with mental retardation, premorbid psychiatric disorder, comorbid central nerve system disease and patients with professional caregivers were excluded. Clinican administered post traumatic stress disorder rating scale (CAPS), the Beck depression and anxiety, and Zarit caregiver burden scales were assessment tools.

Results: Although they had experienced traumatic events, 32.1% (n=27) of the patients did not have PTSD, while 40.5% (n=34) had PTSD. About 28.6% of these had acute PTSD symptoms and 11.9% (n=10) had had PTSD symptoms in the past. Patients with PTSD had statistically significant higher scores of depression, anxiety and caregiver burden.

Discussion: Perception of stress may be influenced by several factors including personality and economical factors. Expression of feelings may increase stress tolerance. The differing results may be due to the factors above as well as methodologies, different stages of assessed samples, social and cultural differences, and tolerance to stress. On the other hand, some negative effects of PTSD are screened in this study. These negative factors may influence adjustment of the disabled person and thus may cause a vicious circle.

Key words: Spinal Cord Injury, post traumatic stress disorder, depression, anxiety, caregiver burden

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[PP-037] Ref. No: 230

A comparison before and after using lamotrigine in long term continued treatment: the effect of blood levels

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Objective: The purpose of this study is that determine whether or not the efficacy of lamotrigine, which is an anticonvulsant with a stabilizer quality in neuronal membranes and has inhibitor activity in sodium and calcium channels and presynaptic neurons, is related to blood levels in bipolar disorder. We compared the period before and after lamotrigine use in bipolar cases and studied if there was any relationship between lamotrigine blood levels and clinical progress.
Method: Forty cases, diagnosed with bipolar disorder type I according to the DSM-IV, and taking lamotrigine for at least two years together with any mood stabilizer (lithium, anticonvulsants or atypical antipsychotics), were evaluated consecutively. For evaluation, being in remission period was set as a criterion for these cases. Patient interviews were carried out with the SCID-I in bipolar cases. Before or after protective treatment, the SCIP-TURK Mood Disorders Diagnosis and Patient Registration Form were filled in by the patients and their relatives. Later blood samples were taken from the bipolar cases in order to analyze lamotrigine blood levels.
Results: In the bipolar cases, when comparing before and after long term maintenance of lamotrigine, it was determined that after using lamotrigine, total episode and depressive episode frequency decreased, episode severity was less ($p< 0.001$, 0.039, and 0.04, respectively) and the fast onset and termination ratio decreased ($p= 0.027$). When evaluated according to these variables, in long term maintenance, the ratio of good treatment response to lamotrigine among bipolar cases was 77.5%. In cases with good treatment response to lamotrigine, while lamotrigine doses were found to be similar to the others (135.5±52.7/155.6±69.7 mg/day), lamotrigine blood levels were found to be higher (3.8±1.9/2.0±1.1 µg /ml) ($p= 0.005$). No correlation was shown between lamotrigine dose and lamotrigine blood levels ($r= 0.185$, $p= 0.254$).
Conclusion: As a result, lamotrigine is an efficient choice in long term maintenance treatment of bipolar disorder. The relationship of this efficacy to lamotrigine blood levels must be explored in future studies.
Key words: Lamotrigine, bipolar disorder, blood level

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ICAM, VCAM and E-selectin levels in first episode schizophrenic patients

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Objective: It is known that mortality rates in schizophrenic patients with cardiovascular diseases are twice as high as other diseases. Some of the research has revealed that the risks of cardiovascular disease were dependent on adhesion molecules. The main adhesion molecules are intracellular adhesive molecule (ICAM-1), vascular cell adhesive molecule (VCAM-1) and E-selectin. The aim of this study was to determine whether or not ICAM-1, V-CAM-1 and E-selectin levels, which are considered as possible biological determinants in the prognosis and progression of atherosclerosis, change with treatment in schizophrenic patients with respect to controls.
Method: In the Erenköy Research and Training Hospital for Neuropsychiatry, 50 patients who were diagnosed with first episode schizophrenia according to the DSM-IV-TR diagnostic criteria and had never received antipsychotic treatment and a control group consisting of 50 healthy volunteers were enrolled the study. At the beginning of the study (n=50) and after the third month (n=39), ICAM, VCAM, E-selectin, Fasting Blood Glucose, Total Cholesterol, LDL Cholesterol, HDL Cholesterol and Triglyceride levels were checked in the plasma of each patient and compared with each other. For the control group, the same biochemical parameters were investigated only at the beginning of the study. In order to assess the termination of the acute episode, the patient group was given the Positive Symptoms Assessment Scale (SAPS) and Negative Symptoms Assessment Scale (SANS) in the beginning and at the end of the third month.
Results: In the first episode schizophrenic patients, the average age was 30.14±7.50 years. In the patients, the beginning ICAM-1 levels were lower than the control group ($t= 3.41$, $p=0.001$) and increased during treatment ($t=-6.73$ $p<0.001$), while VCAM-1 and E-selectin

levels were similar to the control group (t=-1.23, p=0.223; t=-0.32 p=0.750, respectively). In addition, after treatment the VCAM-1 level was determined to be lower than the pretreatment level (t=7.17, p<0.001). Whereas the averages of Fasting Blood Glucose, Total Cholesterol, LDL Cholesterol, HDL Cholesterol and Triglycerides were similar in the control and patient groups, a significant increase was observed in the triglyceride levels of the schizophrenic patients after treatment (t=-3.19, p=0.003). According to the statistics, a significant positive correlation was found between ICAM and triglyceride values (r= 0.351, p<0.001).

Conclusion: When compared with the control group, it was observed that the levels of cellular adhesion molecules of individuals with first episode schizophrenia were not different, except for ICAM-1. Whereas according to the information retrieved from levels determined in plasma during treatment, cellular adhesion molecules act differently. It was observed that the antipsychotics used for treatment had an effect on increasing ICAM-1 and decreasing VCAM-1. It is possible that the number of patients was not enough, the disease does not have a homogenous structure, and some other unknown confounding factors could be present. Our findings need to be replicated by other clinical groups in larger studies.

Key words: Atherosclerosis, E-selectin, ICAM-1, schizophrenia, VCAM-1

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[PP-039] Ref. No: 175

Body dysmorphic disorder incidentally treated with bupropion

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Introduction: Bupropion is a preferential dopamine and norepinephrine reuptake inhibitor. It has been shown to be effective in patients with depression and socialphobia, however data on its efficacy in body dysmorphic disorder (BDD) are lacking.

So far, only two BDD cases have been reported to respond bupropion treatment. Herein, we report another case of a patient with BDD incidentally treated with sustained-release bupropion.

Case Report: Mr. H., a 26-year-old factory worker, visited a psychiatric outpatient clinic with the intent to quit smoking by seeking professional help. Bupropion sustained-release was initiated at 150mg/day during the first week and then raised to 300 mg/day, along with behavioral counseling. He was able to remain smoke free in the sixth week of the treatment.

During his control visit on the 8th week, Mr. H. stated that his preoccupation about his face had also disappeared. Mr. H. looked normal but had been preoccupied with the appearance of his face since age 16. He reported thinking about his appearance for at least 5 to 6 hours a day and he worried that other people would notice him or judge him negatively because his skin looked so 'deformed'. For 3 to 7 hours a day, Mr. H. checked his face in mirrors and other reflecting surfaces and compared his face with the faces of other people. Because he was so preoccupied with, and distressed by his face, Mr. H. was often late for work, and his productivity suffered, which resulted in conflicts with his employer. Previously, he had been fired from three jobs because of these symptoms. As Mr. H. was so embarrassed about how he looked, and feared that other people would judge him negatively, Mr. H. avoided all contact with friends and saw his family only on special occasions. He did not seek help about his symptoms and he avoided mentioning his complaints because he felt ashamed of talking about his appearance. He was diagnosed as body dysmorphic disorder according to the DSM-IV criteria. Mr. H. reported that his preoccupation had diminished gradually during treatment and that he had been peaceful about his face for 2 weeks. During 3 months of follow-up, he was well maintained on sustained-release bupropion and there was no re-emergence of his symptoms.

Discussion: Currently, selective serotonine reuptake inhibitors (SSRI) are recommended as the first-line medication for BDD, including delusional BDD. SSRI antidepressants have been reported to be more efficacious for BDD than non-SSRI antidepressants or other types of psychotropic medications.

The literature regarding the efficacy of bupropion in the treatment of BDD is restricted to a single report. Nardi et al have reported two cases with coexisting BDD and major depressive disorder (MDD) who were resistant to antidepressant pharmacotherapy and were treated with bupropion 300 mg/day. Our case responded well to bupropion treatment although he did not have comorbid MDD.

According to our case report, bupropion may be a treatment option for some patients with BDD. Further studies and case reports are required to explore the efficacy of bupropion in the treatment of BDD.

Key words: Body dysmorphic disorder, bupropion

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Tardive akathisia with aripiprazole: A case report

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Tardive akathisia is characterized by feelings of restlessness, discomfort, and tension causing the patient to be unable to settle down and sit still. The patient should also be taking a long term antipsychotic medication without any recent changes in dosage or type, and no withdrawal of antiakathisic drugs. Aripiprazole is a potent partial agonist that shows high affinity binding to dopamine (D2) and serotonin (5HT1a) receptors and is an antagonist at 5HT2a, 5HT2b receptors. Although there are a number of case reports about arippiprazole causing acute akathisia, only one tardive akathisia case, who was a nonpsychotic female patient, has been reported so far. In this case tardive akathisia with aripiprazole developed in a patient who had diagnoses of mental retardation and psychotic disorder not otherwise specified and who was treated by supplementary drugs without stopping aripiprazole.
Key words: Antipsychiotics, aripiprazole, extrapyramidal side effects, atypical antipsychotics, tardive akathisia, tardive syndromes

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Comparing mental disorders between divorced couples and normal couples in a city of Iran

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Background: The family is the first and the most important source for fulfilling needs of human beings including love, satisfaction and peace. One serious difficulty in couple's lives is the phenomenon of divorce, which recently has been increasing in Iran. Divorce has a lot of negative effects, both physical and psychological, on couples.
Objective: The aim of this study was to compare mental disorders between the couples who were divorced and normal couples in a town in Iran.
Method: This research was causal –comparative on couples in Sirjan in 2010. Seventy couples were chosen voluntarily and randomly based on the duration of their marriage from couples applying for divorce and refereeing to the administration of justice and normal couples. The questionnaire symptom checklist-90-revised (SCL-90-R) was used. The data were collected and analyzed.
Results: The averages of mental disorder scores between two groups in nine dimensions were compared and showed different significances. People who had gotten divorced had more high scores comparing the total coefficient of global severity index (GSI). The findings revealed that the divorced couples had higher GSIs and a significant correlation was observed ($p<0.05$). In addition the average Positive Symptom Total (PST) was higher (59.03±24.09) for divorced couples compared to normal couples (40.9±24.25) There was a significant correlation, too ($p<0.05$). Comparing positive symptom distress indexes (PSDI) between the two groups using the t-test showed a different significance ($p<0.05$).
Conclusion: The results of the present study illustrated that divorced couples had higher GSI, PST and PSDI ($P<0.05$). In order to deal with divorce complications, background factors and variables must be considered that lead to the increase in divorce in the community.
Key words: Mental disorder, marital conflict, divorce, SCL-90

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Suicide rate in Oman in the period between January 2000 and December 2010

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Background: Suicide rates have been explored in different parts of the world, including many Arab /Islamic countries. To our knowledge, no study has been conducted in Oman so far.
Objective: To examine the rate of suicide in the Sultanate of Oman in a ten year period (2000-2010).
Method: The data kept at the Royal Oman Police Forensic Department were queried for the presence of suicide as a cause of death for a 10 year period (2000-2010)
Results: The total number of suicide cases in Oman in that period was 599, with 59.9 cases every year. Omanis account for 8.7 cases every year.
Conclusion: Based on our data the suicide rate in Oman was found to be 2 /100,000 /year. This puts Oman in the group of low suicide rate countries in the world.
Key words: Suicide rate, Oman, ten year period

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[PP-043] Ref. No: 179

The effect of the recitation of the Quran on depressed patients in the psychiatry department of Moradi hospital in Rafsanjan (IRAN)

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Background and Objective:: Depression is a common psychiatric disorder and has a huge impact on human life. Data published in scientific sources suggest that about one hundred million cases are diagnosed annually. Depression comprises about 35 to 45% of all mental disorders in Iran. Unfortunately, this figure is rising day by day and it is necessary to look for new and modern methods for treatment and prevention of this psychiatric disorder. One of the non- medicinal methods of treatment is music therapy, which seems to be a safe and effective therapeutic method. Reading the Koran with a pleasant voice can be regarded as a kind of agreeable Gnostic music. The main purpose of this research was to determine the effect of the recitation of the Koran on depression.
Methods: This study was a semi-experimental one and included all the depressed patients who had been hospitalized in the psychiatry department of the Rafsanjan Moradi Center. The sampling time period was one year. The patients were divided into two groups randomly, (30 people in the experimental and 30 in the control group). The selection of the subjects was based on the psychiatrist's diagnosis, Beck's depression scale and the condition of the patients. The questionnaires were filled out for the case group. Recitation of Yousof Verse of the Koran by Abdolbaset, was transmitted for the case group, for 15 minutes every other day for 7 sessions. At the end of the first two weeks of hospitalization, both of the groups were retested by another questionnaire and the results were analyzed by paired t- test and Student's t test by EPI6.
Results: The result of this research showed that the Koran reciting had a beneficial effect on the depressed patients ($p<0.0001$). In our study the patients who expressed a strong belief in the Koran had a greater decrease in median depression scores before and after this kind of therapy.
Conclusion: According to the results of this research and because of the rhythmic agreeable intonation of the Koran as a Gnostic music and its miracle aspect, we can use the Koran tone as a non-medicinal method of therapy in the treatment of depressed patients.
Key words: The Quran reciting, depression

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[PP-044] Ref. No: 239

Dissociative symptoms associated with piracetam use: a case report

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Piracetam is a cyclic derivative of a gamma-aminobutyric acid drug that is often used in neurology practice (1). It has antithrombotic and neuroprotective properties and improves cognitive performance (2).

In this article, a case report, piracetam is used for combined therapy, but after piracetam use, dissociative symptoms like depersonalization and derealization were detected.

Case: A 29-year-old female patient applied to the psychiatric clinic with the following complaints: Intense discomfort, alienation from herself, perceiving herself odd , that perception that her hands and feet were bigger, feeling like not living in the society, the feeling that colors and sizes of objects seemed abnormal, and feelings of alienation from objects and people in her surroundings. These complaints continued for 10 days and she had never had any psychological complaints before. She also expressed that these complaints bothered her greatly. Except for these complaints, she did not describe any other abnormality in perception and thought content. She did not have prominent depressive symptoms and psychosocial stress in her history. One month ago, she had seen a neurologist for vertigo. She was diagnosed with peripheral vertigo and prescribed betahistine 16mg/day. After this medication, she described a marked reduction in the vertigo, however since she did not get rid of her complaints completely, after 12 days she was prescribed piracetam 2400mg/day as combination treatment.

On psychiatric examination, she was conscious, oriented normally, anxious,appeared ready to cry, thought contents were normal, positive depersonalization and derealization in the perception, psychomotor activation was normal. Nothing abnormal was detected in her hemogram, biochemistry, serum B12, thyroid function tests, EEG, and brain MRI.

In clinical follow-up, since there was a connection between the patient's administration of piracetam and the dissociative indications, piracetam was stopped. Betahistine was continued in the same dosage. It was observed in daily observation that after a day, a decrease in her dissociative symptoms began and in 5 days they had totally disappeared. In further follow up visits dissociative symptoms were not observed in a month.

The dissociative symptoms like derealization and depersonalization were started with addition of piracetam to the treatment, and diminished quickly after piracetam was stopped. This directed us to think that those dissociative symptoms were related to the piracetam administration. This relation is not established in literature (3).

Trauma is usually reported as the origin of dissociative symptoms. There generally is childhood period trauma and dissociative symptoms come up in later life. There is still no etiopathogenesis described related to development of dissociative symptoms. Traumatic stress and neurobiological theories are basic models suggested in etiology (3). In the medication studies, depersonalization is the basic dissociative symptom in dissociation's neurobiological theories. In those studies, it is also shown that serotonergic and glutamate receptors have a role in depersonalization (3).

We think that this case report which shows the administration of piracetam and development of dissociative indications may contribute to the neurobiological theories on dissociative disorder's etiology.

Key words: Dissociative symptoms, piracetam

References:

1. Değirmenci E, Şahiner T, Erdoğan Ç. Long Term Effects of Piracetam on Spectral Analysis of EEG in Alzheimer's Disease and Minimal Cognitive Impairment. Klinik Psikofarmakoloji 2006;16:93-7
2. Winbland B. Piracetam: a review of pharmacological properties and clinical uses. CNS Drug Rev 2005;11:169-82
3. Wınnica K, Tomasiak M, Bielawska A. Piracetam-an old drug with novel properties? Acta Poloniae Pharmaceutica- Drug Research 2005;62:405-409

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Reversible normoprolactinemic galactorrhea induced by fluoxetine

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Introduction: Several drugs can cause galactorrhea and it's etiology needs to be differentiated from other local or neuroendocrinological causes. All conventional antipsychotic drugs block D2 receptors on lactotroph cells and thus remove the main inhibitory influence on prolactin secretion. Tricyclic antidepressants, selective serotonin reuptake inhibitors, and monoamine oxidase inhibitors are less frequent causes. There is evidence that serotonin may stimulate prolactin release directly via postsynaptic 5-HT receptors in the hypothalamus or indirectly via 5-HT mediated inhibition of tubuloinfundibular dopaminergic neurons. However, galactorrhea due to antidepressants is not consistently associated with elevated prolactin levels, which may suggest still unexplained mechanisms of antidepressant-induced galactorrhea.

We report a case of euprolactinemic galactorrhea in a woman with generalized anxiety disorder while on treatment with fluoxetine.

Case Report: A 29-year-old woman visited a psychiatric outpatient clinic with complaints of excessive and uncontrollable worry about minor life events, feeling restlessness, irritability, muscle tension, tiring easily, and poor sleep that started 8 months prior to admission. She had no history of endocrine or reproductive pathology or psychiatric problems. She was diagnosed as having generalized anxiety disorder according to the DSM-IV criteria and was started on fluoxetine 20 mg per day. After 4 weeks of medication, her symptoms diminished. However, she developed unilateral galactorrhea (the nonpuerperal discharge of milk-containing fluid from the breast). She had no history of galactorrhea. She first noticed the discharge on treatment day 21 and described it as white-creamy and from the right nipple. She did not notice any bloody, greenish, or foul-smelling discharge, nor did she report any sexual dysfunction. She consulted her gynecologist, who recommended a mammogram and breast ultrasonography. The pregnancy test was negative. The results of these tests and breast examination were normal. Serum prolactin level on treatment day 28 was 18.18 ng/mL (reference range: 2.5-29 ng/mL). Because her galactorrhea developed after the initiation of fluoxetine, her medication was discontinued. Buspirone 5 mg/day was started and gradually raised to 20 mg/day. Eight days after stopping fluoxetine, the patient reported reduction and cessation of galactorrhea. At the 3 month follow-up visit, the patient was well maintained on buspirone and there was no re-emergence of galactorrhea.

Discussion: Although galactorrhea caused by the use of fluoxetine has been reported earlier, the commonly perceived cause is hyperprolactinemia. Fluoxetine has been shown to potentiate elevation of prolactin levels from other stimuli, including insulin, fenfluramine, and 5-HT. However, hyperprolactinemia is not the only mechanism responsible for the development of SSRI-induced galactorrhea. The exact mechanism of galactorrhea remains unknown in many cases.

Our patient developed galactorrhea without hyperprolactinemia after beginning fluoxetine therapy. The strict temporal relationship between the use of the drug and the onset of galactorrhea, as well as the resolution once treatment was discontinued, suggests a causal link between the two phenomena.

To the best of our knowledge, we are the first to report an association with fluoxetine use and galactorrhea without elevated prolactin levels. Clinicians should consider fluoxetine as a possible cause of galactorrhea even with normal prolactin levels. Future research should investigate the precise mechanisms of antidepressant-induced normoprolactinemic galactorrhea.

Key words: Fluoxetine, galactorrhea

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[PP-046] Ref. No: 240

Influence of polymorphism of the norepinephrine transporter gene (SLC6A2) and alpha-2 adrenergic receptor gene (ADRA2A) on regional cerebral blood flow in a Korean ADHD sample: a preliminary study

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Some genes related to the noradrenergic system have been investigated as candidate genes in Attention Deficit Hyperactivity Disorder (ADHD). Through functional brain imaging studies, it has been reported that brain areas such as the prefrontal cortex (PFC), dorsal anterior cingulate cortex, and striatum show abnormal findings in ADHD patients. We have investigated whether there was an association between polymorphism of the noradrenergic system related genes (SLC6A2 and ADRA2A) and regional cerebral blood flow (rCBF) in a Korean ADHD sample.

Methods: A total of thirty-six children (31 boys and 5 girls, mean age: 8.9 (± 1.84) years) participated in this study. Subjects were recruited from the outpatient's clinic of child and adolescent psychiatry in the Seoul National University Hospital. The diagnosis of ADHD was made based on the DSM-IV-TR. All patients were drug naïve at the time of image acquisition. Genotyping of SLC6A2 (G1287A, -3081(A/T)) and ADRA2A (DraI, MspI) was done. SPM8 (Statistical parametric mapping 8) was used to compare images between the two groups divided by each genotype.

Results: Children with the G/A and A/A genotypes at the SLC6A2 G1287A polymorphism showed decreased rCBF in the right inferior temporal gyrus and the left middle temporal gyrus compared to children with G/G genotype (uncorrected p-value< 0.001). In ADRA2A MspI polymorphism, children with the C/G and C/C genotypes showed increased rCBF in the left striatum and the left cingulate gyrus and decreased rCBF in the left cerebellar vermis compared to children with G/G genotype.

There were no significant rCBF alterations across genotypes in the SLC6A2 -3081(A/T) and ADRA2A MspI genes.

Conclusion: This study showed that the noradrenergic system related genes might be associated with functional brain abnormalities in children with ADHD.

Key words: ADHD, neuroimaging, SLC6A2, ADRA2A

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[PP-047] Ref. No: 129

Do we need specialist clinics to monitor metabolic side effects on chronic bipolar patients in Treatment? – Audit of management of bipolar disorder against NICE guidelines in South Staffordshire NHS Trust, UK

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Objective: To highlight the pharmacological management of patients with Bipolar Affective Disorder and to evaluate whether the management meets the current standards as set up by recognised guidelines, especially those underlined by NICE guidelines.

Method: The audit data were collected from a patient population from the West patch of South Staffordshire and focussed on inpatients from the 2 adult units based at Stafford and a psychiatric ICU. It also included a minimum of 5 patients of both genders from all the community teams. The selection was random and not based on severity or duration of the disorder, co-morbidity or other accompanying diagnoses, for e.g, Personality disorder.

The audit tool was devised by the clinical audit coordinator in conjunction with clinicians.

Results: Twenty of twenty-eight 28 patients (72%) were on mood stabilizers, either lithium or sodium valproate, with sodium valproate the more preferred drug.

Twelve of twenty-eight (43%) were on antipsychotics. Three of seven (43%) patients, who did not respond to combination treatment, were started on lamotrigine.

In 21/22 (95%) of the patients, antidepressants were stopped.

Nine of the twenty-eight (32%) patients continued to be on antidepressants even after resolution of the depressive episode.
The compliance of monitoring for physical side effects during the initial period of starting medications was not satisfactory with only:
19/24 (79%) monitored for renal disease,
18/24 (75%) monitored for diabetes,
15/24 (63%) monitored and advised about obesity and
15/24 (63%) drug levels checked regularly.
In 4/28 (15%), there was no documentation about any physical health monitoring.
Only in 50-60% of patients had the monitoring been done annually, but it was regardless of any recognised guidelines.
In 19/26 (73%) the patient's preference of drug choices was recorded.
In 21/28 (75%) patients, there was documentation about discussion of potential benefits and side effects of the medications.
Five of twenty-eight (18%) patients who were prescribed valproate were of child bearing age; 4 were advised to use contraception and one had been sterilized.
Clinical implications: Monitoring cognitive function tests is often dependent on patient mental health, illness, age, and lack of side effects.
Patient preference for drugs should be taken into consideration.
Evidence should be documented regarding clinical need or history of risk on antidepressant medication.
Evidence of long term treatment with antidepressants after resolution of a depressive episode should be documented in the patient notes.
Annual check-ups of parameters should be documented by either the GP or Mental Health Team. However, weight and BP machines may not be available at clinic appointments. There is a need for closer understanding among clinicians about the responsibility for initiation and maintenance of close physical monitoring.
Discussions should be held with women of child bearing age regarding contraception.
Teams to monitor the need for referral to specialist Bipolar Units should be available, regardless of any cost implications.
Key words: Bipolar, mood disorder, mood stabiliser, antipsychotics, physical health monitoring, serum drug levels, cognitive side effects, relapse, pregnant women

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Assessment of risk of absenteeism in elemantary school students

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Finding a resolution to the absenteeism problem is important in terms of children's development. It is necessary that the risk of absenteeism is determined in an early stage and an early warning system is established to prevent absenteeism. For this reason, development of an assessment tool was targeted.
Methods: A qualitative research design was carried out at the first stage of the study. During this research procedure, 97 teachers, 53 administrators, 73 elementary school students who hadleft school, and 76 of their parents who were selected to represent the overall structure of the population in Turkey were included in the study. With the information retrieved from this research, a scale named the Risk Assessment Form (RIDEF) was developed. RIDEF consists of 111 questions within 9 risk categories.
The second stage of the study was carried out with 3871 students studying in 21 schools from 5 different cities, which were selected at the first stage. While 49.5% (n=1924) of the students were between the ages of 7 and 12, 48% (n=1859) of the students were between 13 to 16 years of age. The mean age was 12.27±1.87 years. The mean of days of unexcused absences of those students within the 2009-2010 academic year, during which time this research was implemented, was 6.62±8.93 days and the mean of days of their unexcused absences the year before was 6.08±7.21 days.
At the second stage, the RIDEF was applied to the same students 15 days after the first application and also a different interviewer filled the form for half of the students. The School Atmosphere Scale was applied during the study, as well.
Results: When the total score derived from the scale was compared with the Pearson correlation analysis the interrater reliability was found as r= 0.96 ($p<0.01$). Test – re-test reliability was determined as r= 0.85 ($p<0.01$).

Based on the risk indicators obtained from RIDEF, the Cronbach alpha validity of the scale was calculated as 0.79. When any item is removed from the scale, the value of the internal consistency coefficient varies between 0.77 and 0.79.
It has been observed that there is a statistically significant level of correlation between the School Atmosphere Scale and RIDEF sub-scales (r=0.51, p=0.001).
As a result of the analysis, categorized risk indicators were grouped under two factors, which accounted for 44.73% of the total variance with eigen values over one. The first factor, consisting of 4 items grouped under the title of individual problems related to childhood, explains 30.98% of the variance and the second factor, consisting of 5 items with the title social and economic problems related to the family, accounts for 13.75% of the variance.
The mean scores of the risk points derived from all of the categories showed a statistically significant difference between students with high and low levels of absenteeism.
Discussion: This research study showed that the RIDEF is a reliable and valid scale in determining the risk of absenteeism.
Key words: Absenteeism, assessment

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[PP-049] Ref. No: 185

Effectiveness of an addiction treatment program called SAMBA: A pilot study

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Description of SAMBA program: SAMBA (Sigara, Alkol ve Madde Bağımlılığı Tedavi Programı / Tobacco, Alcohol, and Drug Addiction Treatment Program) is a treatment program which is designed to treat tobacco, alcohol, and drug addiction problems.
Development of SAMBA: Before developing this program, a comprehensive literature review was done. Addiction treatment programs that are still applied in addiction centers in Turkey were reviewed. Necessary meetings with the specialists working in the addiction field were conducted. The weaknesses and strengths of the programs were discussed with the specialists and expectations from an addiction program were reviewed. SAMBA was developed according to the findings of the literature review and suggestions made in the meetings with professionals.
The Content of SAMBA: SAMBA is a program that is based on Cognitive Behavioral Theory. In some sessions, some interventions that are based on Mindfulness and Acceptance Therapy are used. In addition, in some sessions, some techniques of Dialectical Behavior Therapy and Emotion Regulation are applied.
The Structure of SAMBA: SAMBA is composed of 7 modules and 13 sessions. The modules of SAMBA are:
1. The Effects of Drugs, Alcohol, and Tobacco
2. Motivation
3. Mindfulness
4. Anger and Stress Management
5. Relapse Prevention
6. Communication Skills
7. Thinking Errors

Each session lasts around one and half to two hours. All sessions are designed in an interactive mode. It contains activities and didactic lectures.
SAMBA should be applied in group format and by professionals such as psychologists, social workers and psychiatrists.
Pilot Study: The pilot Study of SAMBA was carried out at Ümraniye T-Type Prison. The first pilot scheme was applied with a group that consisted of members who are alcohol and drug addicts. After all the modules were applied, feedback from the group members was collected. According to the feedback, necessary changes were made. Afterwards, the second pilot scheme was done with other members who were again alcohol and drug addicts from the same prison. Based on the feedbacks, SAMBA was reviewed and reached its final form.
The results showed that there was a significant difference between the pre-test and post-test of the dimensions of Anger and Stress Management ($Z= -1.919$, $p<0.5$), Relapse Prevention ($Z= -2.557$, $p<0.5$), and Craving ($Z= -2.874$, $p<0.5$).
The results of the dimension of "Information about Drugs, Alcohol, and Tobacco" were not found to be significant. However, there was a difference between mean scores of pretest and post-test. One possible reason for this result might be the sample size.

There was not a significant difference between the results pre-test and post-test of the dimension of Motivation. The results showed that the participants were not well-informed about relapse prevention. Therefore, it is suggested that the focus of the program should be on relapse prevention.
According to the results of the feedback form, 66.6% of the participants claimed that they have learned moderate or very much information from the SAMBA program. 91.6% of the participants claimed that the trainers were moderately or very much successful. Lastly, 75% of the participants reported that they had the opportunity to participate and share ideas during the sessions again moderately or very much.
Key words: Addiction, psychotherapy, treatment, effectiveness

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[PP-050] Ref. No: 187

Psychometric properties of different forms of the Addiction Profile Index (BAPI)

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The Addiction Profile Index (BAPI) is composed of 37 items and 5 subscales assessing the characteristics of substance use, dependency diagnosis, the effect of substance use on the person's life, craving, and the motivation to quit using substances. The reliability and validity of the scale were reported in a very recent study.
In these current studies, we aimed to develop a clinician-administered form (BAPI-U), clinical form (BAPI-II) and a short form of BAPI (BAPI-K).
Study 1: Psychometric properties of clinician-administered form of BAPI
Items of the BAPI were changed to a clinician asked type. In the original BAPI 5-point likert ratings were used. In this questionnaire we used 3-point likert ratings.
A total of 150 male inmates were recruited from the Umraniye, Istanbul T-type prison. Cinical Psychologists and guardians of the prison conducted face-to-face interviews with inmates to complete the BAPI.
The BAPI-U items were found to be significantly correlated with the self-reported form (0.89). High correlations between interviewer ratings in all subscales were found. Factor analyses yielded four factors for the BAPI-U, which were similar to the BAPI.
It was concluded that the BAPI-U has similarities with the BAPI and therefore it may be applied by non-clinical professionals (such as nurses, guardians etc) after a short training period.
Study 2: Development and psychometric properties of the clinical form of the BAPI
It is important to know the factors causing alcohol or substance dependence disorders in order to choose the treatment modality and to prevent relapses.
In order to assess depression, anxiety, anger, and assertiveness, new items were added to the original BAPI items. This new instrument was named the BAPI-II.
The research sample was similar to study 1. The Beck Depression Inventory, Rathus Assertiveness Inventory, Multi-dimensional Anger Scale and STAI-1 were used in this study.
The Cronbach Alpha value of the whole scale was found to be 0.79. The self and clinican administered rating correlations were statistically significant. The correlation of the BAPI-II with the other scales was high. One factor was obtained and 54.34% of the variance was explained by this factor.
High correlations were found between the ratings of psychologists and prison guardians in all subscales. This shows that the BAPI may be administered by non clinical professionals efficiently.
Study 3: Development and psychometric properties of the short form of the BAPI
This study was conducted to develop a shorter version of the BAPI to be used as a screening tool. The study was carried out with 1200 people in 7 different prisons. Based on the results of the statistical analyses, some questions were removed. The short version of the BAPI is composed of 23 questions and is named as BAPI-K.
The correlation between the original form and the short version of the form was found to be very high (0.96). Both subscales of the two scales were found to be correlated. The scores of the correlations of the BAPI with CAGE and AUDIT were also found to be statistically significant. The internal consistency of the new scale was found to be satisfactory (0.89).
The results have shown that the BAPI-K is a valid and reliable instrument, and can be used as a screening tool.
Key words: Addiction, assesment, questionnaire

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Aripiprazole treatment for the choreoathetoid movements and psychotic symptoms of Huntington's disease: A case report

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Introduction: Huntington's Disease, that is caused by CAG trinucleotide repeat expansion in the IT15 gene located on the short arm of chromosome 4, is an autosomal dominant, progressive neurodegenerative disorder characterized by motor, cognitive, and psychopathological symptoms (1). The disease is accompanied by a variety of psychiatric disorders and its incidence rates range from 33 to 76%. Although depression is the most common accompanying psychiatric disorder, anxiety, obsessive-compulsive disorder, irritability and manic and psychotic symptoms may be associated with Huntington's Disease (2).
In this case report, we discuss the effectiveness of aripiprazole on the motor and psychiatric symptoms of a patient with Huntington's disease, who had psychotic symptoms.
Case: Two years ago, psychotic symptoms developed in addition to existing neurological symptoms in a fifty-year-old patient who was known to have had Huntington's disease for twenty years.
After one month of 30 mg/day aripiprazole treatment for a diagnosis of 'Psychotic Disorder Due to a General Medical Condition', a significant decline was observed in the motor and psychotic symptoms that had been present at the beginning of the disease.
Discussion: Although the pathogenesis of the Huntington's disease has not been exactly solved, the glutamatergic and dopaminergic systems with striatal neurodegeneration are thought to be responsible for the clinical signs of the disease (3).
By the consideration of this process it is conceivable that aripiprazole, which is used in the treatment of psychosis and chorea, may be a well-tolerated agent for its effects on the negative and positive symptoms with low metabolic and extrapyramidal side effects.
Key words: Aripiprazole, choreoathetoid movement, Huntington's disease

References:

1. Walker FO: Huntington's disease. Lancet 2007; 369:218–228
2. van Duijn E, Kingma EM, van der Mast RC: Psychopathology in verified Huntington's disease gene carriers. J Neuropsychiatry Clin Neurosci 2007, 19:441-8.
3. Paoletti P, Vila I, Rife´ M, et al: Dopaminergic and glutamatergic signaling crosstalk in Huntington's disease neurodegeneration: the role of p25/ cyclin-dependent kinase 5. J Neurosci 2008; 28:1090–1101

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Acute effects of Bacopa monnieri on mood in healthy young adults

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Objectives: Previous research has identified that Bacopa monnieri (BM) improves aspects of cognitive functioning such as attention, speed of information processing and verbal learning with chronic dosing (300mg daily). To date there have been no reports of acute neurocognitive benefits of BM where acute testing has been evaluated; only one known study has reported on acute Bacopa measures[1]. It is possible that in this previous study the cognitive instruments were not demanding enough to detect acute effects. This study is the first acute dose ranging study of BM using multi-tasking cognitive assessment and measurement of mood.
Methods: Seventeen healthy young adults took part in this double-blind, placebo-controlled three-period crossover study. They were administered 300 mg BM, 600 mg BM, or a matching placebo on different days with a seven-day washout period between visits. The treatment order was determined using a Latin Squares design. Following baseline assessment, participants were administered the day's treatment and further assessment took place 1 h and 4 h later. The assessments included the Purple multi-tasking framework (MTF) and the Bond-Lader mood visual analogue scales (administered before and after each 20 min MTF session). The MTF is a 20 minute framework where participants are required to complete four tasks simultaneously. Tasks include Stroop, maths, tracking and working memory.
Results: There was a significant, dose-dependent effect of treatment on ratings of alertness favouring the 600 mg treatment at both

post-dose assessment times. There was a trend for dose-related effects on performance of the MTF, in particular for the Stroop task, where there was an advantage for the 300 mg dose.

Conclusions: This is the first demonstration of acute neurocognitive effects of BM. The combination of increased alertness for 600 mg and better selective attentional performance for 300 mg suggests that mood and cognitive processes can be dissociated and that different doses of Bacopa may benefit different neural mechanisms.

Further participants are needed for this cohort to increase the statistical power of these findings.

Key words: Bacopa monnieri, nutraceuticals, mood, cognition

References:

1. Nathan, P.J., et al., The acute effects of an extract of Bacopa monniera (Brahmi) on cognitive function in healthy normal subjects, in Human Psychopharmacology: Clinical & Experimental. 2001, John Wiley & Sons Ltd. 1996. p. 345-351.

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Anxiety and depressive symptom levels among adolescents with risk taking behaviour

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Background: In our country, risk taking behavior has increased among adolescents in recent years. Risky behaviours are defined as behaviors that affect an adolescent's health and wellness and daily life directly or indirectly. These behaviours can cause potential negative results. Bullying, smoking, using alcohol or drugs, early or unprotected sexual activity, skipping school, elopement, damaging friends and self destruction are the most frequent risky behaviors among adolescents. Through previous research, it has been shown that the moods of adolescents with risky behaviors differ from other adolescents. Thus it is thought that there may be an association between risky behavior and depression and anxiety.

Objective: This study investigated the differences between adolescents with risky behaviour and the ones with non-risky behaviour in terms of depressive and anxiety symptom levels.

Methods: The participants were from different regions and different socio-economic statuses. A total of 3483 students from forty-three schools (12 vocational high schools, 23 state schools and 6 private high schools) and104 classes were included in this study. The multi-stage cluster sampling method was used for the selection of the sample. In the study, YSR 11-18 (Youth Self Report) and a questionnaire, which was developed by the researchers, were used. The research survey consisted of 238 items; The questions covered demographical information, parent and region features, problems about school life, risky behaviours, neglect and abuse, disease, trauma, and health.

Results: In this study, 45.5% of participants were female, 54.5% were male. According to the analysis of each risky behaviour, significant differences were found for depressive and anxiety symptom levels between groups.

Adolescents who exhibit bullying, elopement, self destruction, commit crimes, and have damaging friends are more likely to show anxiety and depressive symptoms compared to non-risky behavior adolescents.(p=0.000). In addition, the level of depressive and anxiety symptoms of drug users were higher than the level of depressive and anxiety symptoms of non-users (depressive; p=0.000, anxiety; p=0.019).

Adolescents who are carrying a weapon, using alcohol, working in a job and skipping school had a higher level of only depressive symptoms (p=0.0000). On the other hand, only the high level anxiety group had unprotected sexual activity (p=0.092).

Conclusions: A comparison of non-risky behavior adolescents to risky behavior adolescents showed significant differences in terms of anxiety and depressive symptom levels and these symptom levels changed according to the risky behaviour type.

Key words: Adolescents, anxiety symptom levels, depressive symmptom levels, risky behavior

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The relationship between mental health and academic achievement among Kordestan high school students

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Objective: Academic achievement is one of the important factors to which parents, teachers and society pay attention and also, it is related to students' mental health. The main objective in the present study was to determine the relationship between students' mental health and their academic achievement.
Method: The sample of this study was 1662 high school students (765 males and 908 females) in the age range of 14-19 years. The sampling method of this study satisfied random sampling. Also, data were gathered by using the GHQ-28. The GHQ-28 is an instrument to determine mental health and it includes four scales measuring depression, anxiety, somatization and social function. The reliability of this scale is 0.91 by Cronbach's alpha.
Results: The results of the present study showed that 45.4% of the respondents had a lack of mental health. Based on the results of the current study, the low rate of lack of mental health (42.2%) was in the first grade of high school while, the high rate of loss of mental health were among Pre-University students.
In addition, the results from the present study indicated that there is significant relationship between the education of the respondents' father and students' mental health ($p<=.0.001$). According to the present study, there was a significant difference between gender and mental health ($p<=.0.001$).
Conclusions: Various factors such as self-esteem, motivation, anxiety, attention and concentration, gender, study curriculum and mental affective situations impact on academic achievement. As a result all of the mentioned factors are related to mental health directly or indirectly. So, it is suggested to investigate the mental health and also types of mental disorders among students in of Iranian schools especially among high school students.
Note: The sponsor of present study is the Education Office in Kurdistan Province.
Key words: Mental health, academic achievement

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Does the profile of addiction change according to the type of the substance used?

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Objective: The Addiction Profile Index (BAPI) is a self-report scale that has been developed in order to assess addiction severity and different dimensions of addiction. The BAPI is composed of 37 items and 5 subscales. The subscales assess substance use characteristics, addiction diagnosis criteria, the effects of substance use to the person's life, craving, and motivation to quit. The aim of this study was to investigate the psychometric properties of the scale in people using alcohol and substances.
Methods: A total of 345 alcohol and/or substance abusers participated in the study from two addiction treatment clinics and a prison. The validity of the questionnaire was tested with the Michigan Alcoholism Screening Test (MAST), Readiness to Change Questionnaire (SOCRATES), Penn Alcohol Craving Scale (PACS), Structured Clinical Interview for the DSM-IV Axis I Disorders (SCID I) and Addiction Severity Index (ASI).
Results: The Cronbach alpha coefficient was found to be 0.89. The Cronbach alpha coefficient for alcohol abusers was 0.76, whereas it was 0.70 for substance abusers. The Cronbach alpha coefficients for the subscales ranged from 0.63 to 0.86. This coefficient ranged from 0.57 to 0.83 for alcohol abusers and from 0.67 to 0.86 for substance abusers.
Four factors were obtained according to the explanatory factor analysis and these 4 factors represented 52.39% percent of the whole variance. Two factors represented 48.5% of the variance for alcohol abusers and two factors explained 50.9% of the variance for substance

abusers. In the ROC analyses, the area under the curve was found to be 0.90. The ROC analysis has shown that the area under the curve for alcohol abusers was 0.81 and for substance abusers was 0.93 (Graph 1 and 2).
The BAPI craving subscale was found to be consistent with the PACS and the motivation subscale was found to be consistent with the SOCRATES. The BAPI total score showed a significant correlation with the MATT average score and the composite score of the Medical Condition, Substance Use, and Legal Status and Family Social Relations subscales of the ASI questionnaire.
Discussion: The results have shown that psychometric properties of the BAPI are satisfactory for alcohol and substance abusers. The psychometric properties of the total scale and the data of alcohol and substance abuse are similar. Finally, we can say that the BAPI can assess both alcohol and substance abuse rather than just alcohol use.
Key words: Addiction, alcohol, assessment

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[PP-056] Ref. No: 160

Death anxiety among terminally ill inpatients

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Objective: In spite of the certainty of death, people seem unable to escape anxiety at the prospect of it. Death anxiety contributes to important emotional and behavioral consequences. The aim of this study was to investigate the relationship of death anxiety with variables such as severity of illness, depression, and religious beliefs.
Methods: The study is a cross-sectional descriptive study. The data were collected by using a demographic questionnaire, the Templar Death Anxiety Scale, the Beck Depression Questionnaire, the Cumulative Illness Rating Scale and the Religious Attitude Questionnaire. Stepwise multiple regression analysis was conducted to identify the factors that influenced the degree of death anxiety.
Results: A group of one hundred and fifty persons, (50 severely ill patients, 50 relatives, and 50 normal controls) completed the questionnaires. Death anxiety score was 7.2 in attendants, 5.3 in patients, and 4.4 in the control group. Depression and severity of illness had a positive correlation with death anxiety ($p<0.05$). Religious beliefs had a negative correlation with death anxiety ($p<0.05$). Religious beliefs and depression had stronger predictive value esspecially in severely ill patients.
Conclusions: Among the factors studied depression and severity of illness had a significant positive and religious beliefs had a significant negative correlation with levels of death anxiety.
Key words: Death, anxiety, religious beliefs, depression

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The effective features of access to medical care in Iran

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Objective: Access to medical care is recognized as a fundamental requirement in the health system. The purpose of this study was to improve people's access to medical care through determining the features influencing the access to medical care and its subcomponents and preparing a proper model for public hospitals in Iran.
Methods: The sample size was 406 patients and 401 experts of Iran's public hospitals chosen by a multistage sampling method, in which the country was divided in to 5 regions of the North, South, Center, West, and East. By giving two shares to each region, two hospitals were chosen from each region, then from each hospital 40 patients and experts were chosen separately. To collect data, the researcher prepared a questionnaire to be used. To evaluate the validity of the questionnaires, expert tips, content validity and the factorial analysis method were utilized and in order to evaluate the reliability of the questionnaire the Cronbach alpha coefficient was used. In this

study, the Cronbach alpha coefficient of the questionnaire was calculated to be 0.88 for patients and 0.80 for experts, which was very satisfactory. The data were analyzed by the SPSS software and Lisrel through the factor analysis method.

Results: Based on the responses of 401 patients and 406 experts, the current situation of access to medical care in the public hospitals of Iran has lower than average quality and most of the patients and experts gave a low rating to each of the 5 factors of accessibility in the current situation. In addition, the findings showed that the structure of access to medical care in Iranian public hospitals has a 5-dimensional structure containing individual characteristics, service providing system, social-geographic features, health policy making and management strategies. The relationship among the 5 dimensions was meaningful from 0.13 for the correlation of health policy making with the individual characteristics to 0.40 for the correlation of health policy making with the management strategies.

Conclusions: The findings show that the service providing system had the highest quality and was the most effective factor on having access to medical care structure. It seems that it can be helpful to pay attention to the above factors especially in programming and policy making to improve access to medical care by distributing the standardized number of beds and specialists based on the population of each region, training, organizing, and managing the human resources, and improving the service providing system process.

Key words: Feature, access, access to health care, medical care

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Smoking behaviour during the course of paroxetine treatment: A case report

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Selective serotonin reuptake inhibitors are used for the treatment of a wide range of psychiatric disorders, although nicotine craving attributed to the use of serotonin reuptake inhibitors especially paroxetine has not yet been reported in the literature. Here we present a case, who developed nicotine craving and started to smoke cigarettes after initiation of 20mg/day paroxetine, and discuss possible mechanisms of this side effect while reviewing current status of the literature. A 25 year-old female patient was evaluated at our outpatient clinic and diagnosed with generalized anxiety disorder. She was given paroxetine 20mg/day for four weeks. While her symptomatology improved by the second week of the treatment, she complained of nicotine craving at the fourth week. During psychiatric assessment there was not any history of smoking, alcohol or any other substance use disorder. She mentioned that she started smoking one package/day after starting the paroxetine treatment. The craving for nicotine decreased after the drug was discontinued and she quit smoking within two weeks. We did not find any report of smoking behaviour attributed to SSRIs in the literature, although there is a study about decreased smoking behaviour during paroxetine treatment. To the best of our knowledge this case is the first one in the literature. More research is needed to exlore nicotine craving and SSRIs.

Key words: Craving, cigarette, paroxetine

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Development of a SNP genotyping panel and a medical decision support algorithm to predict drug response in schizophrenia

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Genome Wide Association Studies (GWAS) of Single Nucleotide Polymorphisms (SNPs) is leading the development of personalized medicine approaches to predict and diagnose diseases or to determine drug response in individual patients. As the basic research provides all the genomic information and interpretation of these data, translational research has to be conducted in order to develop

genomic diagnostics to apply this information into practice in medical clinics. In this perspective, our goal is to design a diagnostic assay for the Prediction of Drug Response for Schizophrenia to especially guide the initial selection of antipsychotics based on the individual genomic information of the patients.

Initially a literature search has been done to identify previously described SNPs associated with schizophrenia that are known to effect the response to antipsychotics or predict the side effects of antipsychotic drugs. Twenty-two SNPs are identified, that map to 8 genes. Next, we have applied the novel AHP based SNP prioritization approach implemented in the METU-SNP software for GWAS to the SNP Genotyping data for the European American population (from dbGAP database), with 1351 patients and 1378 controls genotyped for over 729454 SNPs. The 22 SNPs selected based on the literature were cross-checked with the results of GWAS and prioritized in order to finalize the pharmacogenomics of the SNP (p-SNP) panel for schizophrenia and to determine the order of SNPs to be targeted in the assay development process. The pyro-sequencing approach was used during the development of the assay to determine the genotypes of the patients for the SNPs selected for the panel. After the next phase of our project, which is the development and optimization of primer sets, is completed a validation study will be designed in collaboration with psychiatric clinics for the described p-SNP kit panel and the supporting software that is in-line, for development of easy translation of the genotyping results to support the clinical decision of the choice of therapy.

Application of personalized medicine approaches and utilizing genomic diagnostic assays as presented here will eliminate or decrease the number of trials-and-errors in selecting sthe right treatment and dosage for particuler patient, and will also minimize emergency visits due to side effects of the drugs. In addition, the prescription of the right medicine and treatment plan at the initial diagnosis of schizophrenia will increase trust between healthcare professionals and patients, which in return is expected to provide higher cooperation and adherance rates of patients to their treatment. Overall the personalized medicine approach is expected to decrease the cost of healthcare in psychiatry and other disciplines, while offering higher quality healthcare.

Key words: Pharmacogenomics, personalized medicine, translational medicine, genomic diagnostics, medical decision support systems, GWAS, SNP genotyping, METU-SNP, schizophrenia

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[PP-060] Ref. No: 200

Basal ganglial hemorrhage induced mania

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Neuroimaging studies on mood disorders concentrate on the limbic system, especially on the hippocampus and amygdala. Accumulating evidence suggests an association between abnormalities of the basal ganglia and mood disorders. We present a case of mania following basal ganglial hemorrhage.

A 30-year old male, with no history of bipolar disorder, was admitted to the emergency room with complaints of euphoria and decreased need for sleep. During psychiatric assessment, he exhibited grandiosity, psychomotor activation, irritability, and flight of ideas. The patient,whose cranial MRI showed hemorrhage in the basal ganglia, was hospitalized with a diagnosis of mood disorder due to a general medical condition. Lorazepam 5mg/day and olanzapine 10mg/day was started. On the tenth day of treatment his episode ended.

The basal ganglia are interconnected with the limbic system and prefrontal cortex and therefore are implicated in bipolar disorder.

Key words: Basal ganglia hemorrhage, mania

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[PP-061] Ref. No: 233

Evaluation of cognitive functions in euthymic bipolar patients using mono- and multi- drug treatments

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Objective: Some studies on patients suffering from bipolar disorder show that in active and remission periods of the disorder there are cognitive insufficiencies (1,2,3). The causes of cognitive insuffuciencies in bipolar disorder is not understood yet. We anticipate that multi-drug usage has more adverse effects on cognitive functions than mono- drug usage and our aim in this study was to investigate effects of drugs used in treatment of bipolar disorder on cognitive functions. In this study we evaluated the cognitive functions of bipolar patients who were in their euthymic period taking mono- and multi-drug regimens and compared them with a healthy control group.

Methods: Eighty bipolar I and II patients diagnosed based on the DSM-IV criteria and 80 healthy controls were included in the study and two groups matched according to age, sex, and education aspects. The patients and controls gave written informed consent to participate in the study. The necessary approval and ethic committee reviews and permits were obtained prior to the study. The patients were evaluated using a psychiatric interview, the Young Mania Scale and the Hamilton Depression Rating Scale. A large neurocognitive battery (Wechsler Memory Scale-Revised, Stroop,Verbal Memory Processes Scale) was used for neurocognitive assessment.

Results: In most cognitive tests the results of the patient group were worse than the control group. The Verbal Memory Processes Scale-learning scores and long term memory scores were higher in the patients on a mono-drug regimen. All other tests did not show significant differences.

Conclusions: Our study showed that the cognitive function of bipolar patients had deficiencies not only in active periods of bipolar disorder but also in remission periods, like previous studies (4,5,6).

The Verbal Memory Processes Scale learning scores and long term memory scores showed better results in patients using a mono-drug compared to the ones on a multi-drug regimen. Other tests did not show significant differences. Future studies with larger number of patients may show different results. Also other studies to investigate the effects of each drug group on cognitive functions in bipolar patients are needed.

Key words: Bipolar disorder, cognitive functions, euthymia

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[PP-062] Ref. No: 247

Adult ADHD symptoms in cannabis dependence and the importance of comorbidity in Adult ADHD

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Background: Adult Attention Deficit Hyperactivity Disoeder (A-ADHD) is one of the most important neuropsychiatric disorders originating in childhood. According to the last epidemiological studies, ADHD can be persistent into adulthood. Sixty percent of childhood ADHD cases present with at one or more symptoms in adulthood (Biedermann 2000, Wilens 2006). A prevalance rate of 4.4% of adults has been reported for ADHD (Fayyad 2007, Kessler 2006).

Comorbidity with alcohol and substance use disorders in A-ADHD is also common and reported as 50%, which is 2-3 times more common than in the normal population (15%) (Katusic 2005). A-ADHD is reported to be an independent risk factor for substance abuse. Comorbid substance use disorders have been observed at rates of 9-30& (Wilens 2006).

Individuals with substance use dişorders comorbid with A-ADHD do not differ in substance preference from individuals without A-ADHD comorbidity. Cannabis is the most abused substance.

Objective: We aimed to demonstrate the existence and intensity of Adult ADHD symptoms in cannabis dependent individiuals and discuss the importance of comorbid A-ADHD.

Methods: Seventy patients participated and gave informed consent. The participants were selected from patients who underwent

inpatient treatment in the Department for Addiction at Samsun Neuropsychiatry Hospital. Diagnostic interviews were conducted for cannabis dependence syndrome (ICD 10; DSM-IV); the earliest interview was after 21 days of detoxification therapy. For assesment, the Adult ADD/ADHD DSM IV based Diagnostic Screening and Rating Scale was used. The reliability, validity, and transliteral equivalance study had been performed by Günay et.al in 2005 (Günay 2006). The scale was developed by Prof. Dr.Turgay, former Director of the Toronto ADHD Clinic, Ontario,Canada. It is a self assessment scale.

General total and subscale mean scores and standard deviation of the ADHD scale according to group factors were calculated. Mean ADHD total and subscale scores were compared by using the group variable independent t test. The analyses were conducted using SPSS for Windows 16.00.

Results: The ADHD general total mean scores and subscale mean scores were compared between the groups. Considerably higher scores were observed in cannabis dependent individuals.

Twenty-two patients met the criterion of inattention whereas 24 patients met both the criteria of hyperactivity and inattention. Twenty-four patients were re-evaluated and interviewed and Adult ADHD was diagnosed.

Five individuals in the control group met the criterion of inattention, and there were no individuals who met the criteria for both hyperactivity and inattention.

All three subdimensions of the Turgay Adult ADHD Scale were found to be statistically higher in the cannabis dependent patients.

Conclusions: As this study shows, Adult ADHD is highly represented in cannabis dependent patients.(in our sample 35% of patients were diagnosed with Adult ADHD).

The awareness of the ADHD diagnosis in Turkey has rapidly increased over time. However it is not commonly researched, diagnosed, or treated in adult psychiatric units. A major difficulty may be that ADHD has been misdiagnosed because comorbidity is common and 90% of A-ADHD patients present with another psychiatric disorder in clinical practice. Recent studies clearly show a strong relation between ADHD and addiction, which supports the idea that a high percentage of drug dependent individuals are also suffering from undiagnosed A-ADHD. Individuals who are diagnosed and treated are less vulnerable to addiction (Biedermann 1999)

Key words: Adult ADHD, cannabis dependency, substance use

References:

1. Biederman J, Mick E, Faraone SV (2000) Age-de¬pendent decline of symptoms of attention deficit hyperactivity disorder: impact of remission definition and symptom type. Am J Psychiatry 157:816–818
2. Wilens TE (2006) Attention-deficit/hyperactivity disorder and the substance use disorders: the nature of the relationship, subtypes at risk, and treatment issues. Psychiatr Clin North Am 27:283–30.
3. Fayyad J, De GR, Kessler R et al (2007) Cross-national prevalence and correlates of adult attentionDeficit hyperactivity disorder. Br J Psychiatry 190:402–409

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[PP-063] Ref. No: 270

Ganser syndrome as a dissociative disorder: A case report

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Ganser syndrome was first described in 1898 by Sigbert Ganser in 4 prisoners. Initially, it was believed to be rare, occurring mainly in forensic settings. Hence, it was referred to as prison psychosis. Later, such cases were reported more frequently in non-forensic settings. The syndrome has found a place in both the ICD-10 and DSM-IV, despite controversy about its existence and distinctiveness. This disorder was previously classified as a fictitious disorder; currently, it is classified under 'dissociative disorder not otherwise specified.' We report a case of a 38 year old woman with Ganser syndrome. The symptoms started 9 months after the death of her brother's children.

Key words: Ganser Syndrome, vorbeireden, dissociative disorder

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Escitalopram induced galacthorrea: Phenomenon presentation

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Hyperprolactinemia can present with many physical symptoms such as galactorrhea, amenorrhea, infertility and osteoporosis and can also cause psychological problems like depression and anxiety. Hyperprolactinemia is mostly seen as a side effect of antipsychotic medications and rarely can also occur as a side effect of an SSRI. Hyperprolactinemia and galactorrhea as adverse effects of escitalopram are rarely encountered. In this text we present a case, who developed hyperprolactinemia and galactorrhea on the sixth day of treatment. The prolactin level decreased to normal after stopping the medication.
Key words: Escitalopram, galactorrhea, hyperprolactinemia

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Amisulpride use in treatment of Tourette's disorder

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Tourette's disorder is a neuropsychiatric disease characterised by chronic vocal and motor tics that leads to severe psychosocial disability. Many old and new generation antipsyshotics had been used in the treatment of Tourette's Disorder, especially antipsychotics which have strong effects on D2 receptors. Amisulpride is an antipsychotic which has strong effects on D2 and D3 receptors. Parkinsonism, endocrine system side effects, and weight gain are less frequent than with the other antipsychotics. Amisulpride is safely used in the treatment of schizophrenia and the other psychoses in adults. In this case report we discuss amisulpride use in 3 cases with Tourette's disorder. These cases previously used other antipsychotics for Tourette's disorder treatment. Amisulpride was used at a dose of 75-200 mg/day. After treatment in all three of these cases, the Yale Global Tic Severity Scale score decreased.
Key words: Tourette's disorder, amisulpride

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Lithium associated glossodynia syndrome: A case report

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Lithium revolutionized the treatment of bipolar disorder and continues to be the most widely used treatment for this disorder. There are several side effects that result from lithium carbonate therapy and among the most commonly reported are polydipsia, polyuria, tremor and weight gain. There have also been reports of various skin lesions with lithium treatment. The following case report suggests that mucosal lesions may possibly result from lithium therapy. Glossodynia is commonly seen in old female patients. In our case, a 45 year old male had glossodynia after lithium carbonate therapy. The patient's symptoms were under control with a lithium regimen for a year. He stopped using lithium in January 2011 and one and a half months later he was hospitilazed because of dysphoric mania. After his hospitalization, lithium therapy was started again. Three weeks later he reported mucosal ulcerations in the mouth, with associated soreness of the tongue. The tongue appeared inflamed, with cracks or irregular reddish areas. He was evaluated by a dermatologist, who diagnosed him with glossodynia. No other medical causes for the lesions were found; the lesions were presumed to be secondary to

lithium treatment. His lithium treatment was stopped and glossodynia treatment begun. Shortly thereafter, his glossodynia symptoms disappeared. Psychotropic medications can cause mucosal ulcerations and it is important to consider these side effects in the differential diagnosis and and begin treatment as soon as possible.

Key words: Lithium carbonate, glossodynia, side effects

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[PP-067] Ref. No: 300

Two cases of affective disorder due to immunosuppresive treatment that followed renal transplantation

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The advent of effective immunosuppressive medicines in the mid-1980s, most notably cyclosporine, revolutionized solid-organ transplant surgery. For the first time, survival rates reached acceptable levels and rendered organ transplantation a reasonable, non-experimental standard of medical practice. From the beginning, the immunosuppressive medications were noted to have significant neurological and psychiatric side effects. From that time to this, the neuropsychiatric side effects such as subjective anxiety or jitteriness, along with tremor, have served as endpoints in the clinical titration of the the most frequently used immunosuppressive medications, cyclosporine and tacrolimus. Experience over the past 15 years, however, has established the fact that there are other neuropsychiatric side effects, varying from seizures, stroke, and profound cognitive impairment to very subtle forms of neuropsychiatric difficulty. Here we present two cases that underwent uncomplicated renal transplantation and after the immunosuppressive therapy, developed psychiatric symptoms. The first case was a 29 year old woman with psychotic mania, and the second was a 25 year old male with severe depression that followed a hypomanic episode (1-3).

Case No 1: A 29 year-old female patient, with a history of kidney transplantation 9 months ago, developed
insomnia, nervousness, mobility, speaking too much, aggressive behavior towards her mother at home, destruction of items, thinking people were trying to poison her, self-talk in the office, increased skepticism, left her workplace without permission, angry and rowdy behavior.

History: No previous psychiatric treatment. No family history of substance abuse and psychiatric illness. Surgery for kidney transplantation 9 months ago. Twenty mg/day oral olanzapine treatment was started.

Mycophenolate Mofetil 1000 mg tb 2*1 07:30 and 19:30, prednisolone 5 mg tb 1*2 07:30, cyclosporine 100 mg tb 1*1 19.30 cyclosporine 100 mg tb 1*1 21:30 therapy was continued.

Blood samples for monitoring of cyclosporine levels were sent outside the center. MPPI, Rorschach, and psychometric examinations were performed and she was evaluated in the direction of psychotic process. PMA is returning to normal; irritability and the patient's insight improved on olanzapine 20 mg/day treatment and she was discharged.

Case No 2: A 25 year-old, male patient, with a history of kidney transplantation 4 years ago. The symptoms included unhappiness, reluctance, discomfort, passive thoughts of death, and insomnia.

Hisstory Kidney transplant in 2007. Approximately 1.5 years ago he had increased speech and movement and affective elation observed indicated a hypomanic episode in the hospital outpatient clinic as the patient was evaluated. Risperidone 2 mg/day treatment was started. Two months ago the patient presented with depressive symptoms and started sertraline 50 mg/day, quetiapine 25 mg/day, 500 mg 2 * 2, Mycophenolate mofetil, prednisolone 5 mg, 1 * 1, tacrolimus 1 mg tb 2 * 2, a month after inpatient treatment, the patient became euthymic, anxiety resolved, and after the disappearance of suicidal ideation the patient was discharged.

Key words: Renal transplantation, immunosuppresive treatment, depression, affective disorder

References:

1. Trzepacz PT, Brenner R, Van Thiel DH. A psychiatric study of 247 liver transplantation candidates. Psychosomatics 1989;30: 147-153.

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[PP-068] Ref. No: 303

Varenicline induced psychotic disorders: A case report

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Varenicline is a new agent, commonly used to assist individuals with smoking cessation. There is an increase in case reports of psychiatric disorders induced or activated by using the agent. Due to the agent's mechanism of actions, it is possible to make this correlation. Patients who have a mental illness or high-risk persons should be careful about using this drug. In this report, the case of a psychotic disorder induced by varenicline is presented.
Key words: Psychotic disorder, smoking cessation, varenicline

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[PP-069] Ref. No: 309

Affective disorders and catatonia: Report of two cases

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Catatonia refers to a broad group of movement abnormalities usually associated with schizophrenia, but also found in other disorders such as mania, depression, many neurological disorders (especially those involving the basal ganglia, limbic system, diencephalon, and frontal lobes), systemic metabolic disorders, and toxic drug states. Catatonia is often neglected when screening and examining psychiatric patients. Undiagnosed catatonia can increase morbidity and mortality, illustrating the need to effectively screen patients for presence of catatonia, as well as their response to treatment. We describe the clinical presentation of catatonia in a 32 year-old woman with schizoaffective disorder and in a 25 year-old woman with severe psychotic depression.
Key words: Catatonia, mood disorders, depression

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[PP-070] Ref. No: 224

The relationship of incarceration, past suicide attempts, depression, anxiety and attention deficit hyperactivity disorder in cases of anti-social personality disorder

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Bacgrounds and Objective: Even though attention deficit/hyperactivity disorder (ADHD) has been considered as a childhood disorder for a long time, currently it is widely accepted that this is a disorder that continues well into adulthood. Attention deficit hyperactivity disorder (ADHD) is a chronic developmental psychiatric disorder, which starts in early childhood, although its primary symptoms can still be observed in adulthood. The main symptoms are attention loss, impulsiveness, and hyperactivity which result in mental, social, and educational/occupational problems in adulthood (1). The current study aimed to study the relationship of incarceration, suicide attempts, depression, anxiety, and attention deficit hyperactivity disorder in men, who had been diagnosed with antisocial personality disorder (APD). There are previous studies in the literature for equivalent diagnoses (2,3). METHODS: A total of 80 subjects, 44 of whom were diagnosed with antisocial personality disorder according to the DSM-IV-TR diagnostic criteria in Ankara Military Hospital psychiatry clinic and 36 controls, who did not have a psychiatric diagnosis were included in the study. The subjects had been administered a semi-structured interview form for identifying their demographic properties, criminal history, and past suicide attempts. The subjects had also

been given the Wender-Utah rating scale, Hamilton anxiety scale, and Hamilton depression scales. The diagnosis of anti-social personality disorder has been corroborated by a second mental health professional for all such cases.
Results: There was a statistically significant difference between the Wender-Utah test scores of the APD group and the control group ($p<0.001$). There were statistically significant differences between the WU scores of those subjects who had suicide attempts and those who did not; those who were incarcerated and those who were not and those who were diagnosed with depression and anxiety and those who were not ($p<0.001$).
Conclusions: The current study shows that there is a strong relationship between ADHD, anxiety, depression, incarceration, and past suicide attempts among subjects with an APD diagnosis. Better understanding of related factors in APD cases which make up a significant portion of those who have been incarcerated and have past suicide attempts may lead to more effective treatments. Overlooking comorbidity may worsen symptoms and result in resistance to treatment and thus worsen prognosis.
It is important that patients with anti social personality disorder should be screened for comorbidities and that those patients should not go untreated for ADHD, anxiety and depression.
Key words: Antisocial personality disorder, anxiety, adult attention deficit hyperactivity disorder, depression, Wender-Utah rating scale

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[PP-071] Ref. No: 096

Relation between unintended pregnancy and post-partum blues

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To assess the prevalence of post-partum blues in mothers with unintended pregnancy compared with other mothers.
Methods: One hundred normal primiparous women were studied and divided into two groups based on whether their pregnancy was intended or unintended. The maternity blues were assessed in both groups.
Results: Three days after delivery, the blues were noted in 30 of 50 mothers, 20 of 30 women who had unintended pregnancies and 10 of 50 (20%) who had intended pregnancies. There was a significant difference ten days after delivery between the two groups ($P<0.0001$).
Conclusion: Unintended pregnancy may be a potential causal factor for maternity 'blues'.
Key words: Unintended pregnancy, post-partum blues

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[PP-072] Ref. No: 252

Comparison of antipsychotic prescribing in the treatment of schizophrenia between the years of 2004-2009

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Antipsychotic treatment is a basic part of active schizophrenia treatment. Typical antipsychotics have been in use since the 1950s. In the 1990s the antipsychotics that are called atypical, with similar effectiveness and lower extrapyramidal side effects (EPS), were introduced and they have taken the place of typical antipsychotics quickly. Although there are comprehensive practice guidelines and suggestions about optimal antipsychotic prescribing, polypharmacy and the use of high doses (over a dose equivalent of 1000mg of chlorpromazine) are prevalent in clinical practice. Some clinicians propounded that using more than one antipsychotic is more effective and prescribing different antipsychotics is not wrong because of the different effects on different signs of psychosis.
The objective of this study was to review the practice of antipsychotic prescribing in schizophrenia patients, compare the variation of antipsychotic prescribing over a number of years and to generate additional information for studies to understand the underlying

motivations for the use of antipsychotic prescription by psychiatrists.
Five hundred and sixty patients, who applied to the psychiatry clinic of the SSK Ankara Education and Research Hospital in 2004 and were diagnosed with schizophrenia and 423 patients who presented to the same clinic (name changed to the Psychiatry Clinic of Dışkapı Yıldırım Beyazıd Education and Research Hospital) in 2009 and were diagnosed with schizophrenia were included in the study. The data were recorded on the data gathering form that we prepared and included socio-demographic information and details of medication use. We determined that 77.5 percent of the schizophrenic patients were prescribed atypical antipsychotics in single or combined (typical-atypical or atypical-atypical) form in 2004. Forty-five percent of patients were using typical antipschotics as monotheraphy or in combination. In 2009, 91.7 percent of patients were using atypical antipschotics in single or combined form. Only 19.9 percent of patients were taking typical antipschotics in single or combined form. Using atypical antipsychotics reduced the use of typical antipsychotics by a significant amount ($\chi 2=246.26$ and $p<0.001$) (2004), $\chi 2=235.24$ and $p<0.001$ (2009). While 62 percent of patients were using an antipsychotic, 36.6 percent of them had used more than one antipsychotic and 1.4 percent of them weren't take any drug in 2004. In 2009, 63.6 percent of patients were using an antipsychotic, 36.2 percent of patients were using more than one antipsychotic and 0.2 percent of patients weren't using any antypsychotics. Between the two index years there was no difference in the use of one or more than one antipsychotic. We didn't examine why some patients were not on any antipsychotics because it was out of the scope of our study.
The ratio of use of typical-atypical antipsychotics and polypharmacy was similar to the current literature in our study. We determined that the ratio of using atypical antipsychotics increased distinctively in schizophrenia treatment. In 2004, atypical antipsychotics were prescribed in single or combined form (typical-atypical or atypical-atypical) to 77.5 percent of patients, while in 2009 this ratio increased to 91.7 percent. We determined that antipsychotic polypharmacy continued in a high ratio similar to previous studies, altough there is no evidence of additional advantage, but rather an increased risk of adverse effects. More than one antipsychotics were prescribed to 36.6 percent of patients in 2004 and 36.17 percent in 2009. More large-scale studies are needed especially about the motivations that effect the practice of pharmacotherapy in schizophrenia treatment.
Key words: Schizophrenia, atypical antipsychotics, typical antipsychotics, polypharmacy

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[PP-073] Ref. No: 257

Valproate-induced hyperammonemic encephalopathy: A case report

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Valproate-induced hyperammonemic encephalopathy (VHE) is an unusual complication characterized by a decreasing level of consciousness, focal neurological deficits, cognitive slowing, vomiting, drowsiness, and lethargy. VHE may occur in people with normal liver function, despite normal doses and serum levels of valproic acid (VPA). We describe a case of valproic acid-induced hyperammonemic encephalopathy in a bipolar disorder patient with therapeutic VPA levels.
We report a case of a 50 year-old woman with bipolar disorder who presented to the inpatient psychiatry clinic with a manic episode. Sodium valproate was started at a dosage of 500 mg two times a day together with the extended release form of quetiapine 400 mg once a day. After a week she was confused about the day of the week, but was oriented to month, year, person, and place. Her vital signs were stable. The patient reported that she did not feel better and said that she felt slowed down and depressed. The next day she gradually became lethargic, proceeding to stuporous, and she had vomiting and drowsiness. Her blood level of valproic acid was at 97.2 µg/ml. Liver function tests were normal. The blood urea level was 33 mg/dL. Her blood ammonia level was 304 µmol/L, more than ten times the upper limit of the normal range. All psychotropic medications were stopped. After three days her vital signs were stable, and she had no obvious neurological deficits. She recovered fully. Clinical manifestations and hyperammonemia tend to normalize after VPA withdrawal. VHE is a serious condition that can lead to coma and even death. It can, however, be reversed if a precocious diagnosis is made and VPA treatment is discontinued (1). VHE is clinically characterized by an acute or subacute decreasing level of consciousness that goes from drowsiness to lethargy and coma, ataxia, vomiting, and focal neurological deficits (1). Laboratory tests usually show normal liver functions with hyperammonemia. Blood VPA levels are within therapeutic range in most VHE cases (2). The primary treatment for VHE is stopping VPA. Complete recovery generally occurs over a period of one to a few days (3).
Etiopathogenesis is not completely understood, although hyperammonemia has been postulated as the main cause of the clinical syndrome (4). Psychiatrists and the other staff may need to be informed about the potential for hyperammonemia when starting valproic acid, and patients whose tolerance for valproic acid is unknown may need to be monitored for liver functions and blood levels of urea and ammonia.
Key words: Sodium valproate, hyperammonemic encephalopathy, neurological deficits

References:

1. Segura-Bruna N, Rodriguez-Campello A, Puente V, Roquer J. Valproate-induced hyperammonemic encephalopathy. Acta Neurol Scand 2006; 114(1):1-7.
2. Chen WT, Yen DJ, Yu HY, Liao KK. Valproate-induced encephalopathy. Zhonghua Yi Xue Za Zhi (Taipei) 2001; 64(8):474-8.
3. Wadzinski J, Franks R, Roane D, Bayard M. Valproate-associated hyperammonemic encephalopathy. J Am Board Fam Med 2007; 20(5):499-502.
4. Gurjar M, Singhal S, Baronia AK, Azim A, Poddar B. Valproate-induced hyperammonemic encephalopathy: A reminder of rare complication of valproate. J Emerg Trauma Shock 2011; 4(2):321-2.

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[PP-074] Ref. No: 274

Two cases of tardive dyskinesia associated with the use of paliperidone ER and their management

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Paliperidone is an extended-release (ER) medication used in the treatment of schizophrenia and the recommended dose range is 3-12 mg/day (1). Tardive dyskinesia (TD) associated with the use of antipsychotics is characterized by involuntary choreic-athetoid movements occurring in the late stages of the treatment. Choreathetoid movements mostly occur around the mouth and face and athetoid movements alone mostly occur on the head-neck and pelvis (2, 3). We hereby present two cases of perioral dyskinesia who were using paliperidone, and discuss their response to the treatment.

Both patients were females in their 20s and had been diagnosed with paranoid schizophrenia according to the DSM-IV-TR diagnostic criteria. Both patients had been using olanzapine before being switched to paliperidone ER. Olanzapine treatment had been discontinued due to side effects and treatment failure. The durations of paliperidone ER use were 9 months and 1 year, respectively; the doses of paliperidone ER were 9 and 12 mg/day that is consistent with the literature in terms of side effect risk (4). In one of the cases, the occurrence of side effects in combination with a psychotic exacerbation led to a change in antipsychotic drug therapy. In the other case, the drug was not discontinued due to the remission of initial psychotic symptoms and satisfaction of the patient with the treatment; however, the drug dose was reduced. In the treatment of TD associated with the use of paliperidone ER, one case responded to vitamin E 400 MU/day and omega 3 fatty acids while the other was administered propranolol 40 mg/day and clonazepam 1 mg/day. After one month, the scores of both patients on the extrapyramidal symptoms assessment scale were markedly reduced. The patient who had the psychotic exacerbation also had a history of childhood trauma, which we feel had negatively influenced the course of the treatment.

Young age and female sex, and drug use for more than 6 months may increase the risk of TD in patients taking paliperidone; the use of vitamin E, omega 3 fatty acids, propranolol, and clonazepam may lead to a significant improvement in symptoms.

Key words: Extrapyramidal side effects, paliperidone, tardive dyskinesia

References:

1. Janicak PG, Winans EA. Paliperidone ER: a review of the clinical trial data Neuropsychiatric Disease and Treatment 2007:3(6) 869–883.
2. Kaplan HI, Sadock BJ Synopsis of Psychiatry: Eighth ed. Baltimore: Williams & Wilkins, 1998
3. Bernstein JG. Drug Therapy in Psychiatry. Third ed. St.Louis: Mosby-Year Book, 1995
4. Meltzer HY, Bobo WV, Nuamah IF, Lane R, Hough D, Kramer M, Eerdekens M. Efficacy and tolerability of oral paliperidone extended-release tablets in the treatment of acute schizophrenia: pooled data from three 6-week, placebo-controlled studies. J Clin Psychiatry 2008 May;69(5):817-29.

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[PP-075] Ref. No: 301

Effects of agmatine in rats with chronic unpredictable mild stress

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Depression is one of the most common psychiatric disorders which is a leading cause of total disability and economic burden. Although there are medications that alleviate depressive symptoms, they have serious limitations. Therefore better understanding of the neurobiology of the disease is required. Agmatine (l-amino-4-guanidinobutane) is an endogenous amine synthesized from the decarboxylation of arginine. Agmatine has been quantified in nearly all of the organs of the rat including brain and plasma. Agmatine exerts a wide range of biological activities on several organ systems, including the central nervous system, where it has been proposed to act as a neurotransmitter. Agmatine interacts with the imidazoline receptors, alpha-2-adrenoceptors, nicotinic cholinergic receptors, and serotonergic 5-HT3 receptors. It selectively modulates the N-methyl-D-aspartate (NMDA) subclass of glutamate receptors in rat hippocampal neurons via an interaction between the guanidino group of agmatine and the NMDA channel pore and is an endogenous inhibitor of all isoforms of nitric oxide synthase. Agmatine is released from neurons and has neuroprotective properties. The present study was designed to evaluate the effect of agmatine in a chronic unpredictable mild stress (CUMS)-induced depression model.

Animals were allocated to the following study groups: animals not exposed to CUMS (Control group, n=12), animals exposed to CUMS for 5 weeks (CUMS group, n=12), and animals exposed to CUMS and treated with agmatine (CUMS+Agmatine group, n=12). The control and CUMS groups were injected with saline and the CUMS+Agmatine group was injected with agmatine 40 mg/kg, i.p. daily throughout the experiment. CUMS was applied as previously described with a minor modification. Briefly, the CUMS and CUMS+Agmatine groups were subjected to different types of stressors: restraint for 4 h, cage tilting for 24 h, wet bedding for 24 h, swimming in 40C cold water for 5 min, swimming in 45 C hot water for 5 min, pairing with another stressed animal for 48 h, level shaking for 10 min, nip tail for 1 min, and inversion of the light/dark cycle for 24 h. These nine stressors were randomly applied for 5 weeks, during which each stressor was applied for 4-5 times. The rats received one of these stressors per day and the same stressor was not applied continuously for 2 days so that animals could not predict the occurence of stimulation. The control group not receiving stress treatment had free access to food and water but all groups were food and water deprived 24 h before the sucrose consumption test only. After 5 weeks, the sucrose consumption, sucrose preference and forced swimming tests were performed.

The results of this study showed that agmatine administration during CUMS suppressed CUMS-induced depression-like behavioral changes, including a reduction in sucrose preference, body weight, locomotor activity, and a decrease in immobility time in the forced swimming test. Our findings suggest that agmatine may have a protective effect either by inhibiting oxidative damage and/or by modulating neuronal activity in CUMS. Based on these findings, agmatine, as an endogenous molecule, has a promising effect and further studies are required to understand the underlying mechanism.

Key words: Agmatine, sucrose preference, forced swimming test, chronic unpredictable mild stress

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[PP-076] Ref. No: 302

A case of obsessive compulsive disorder with psychotic features that suffered from sexual trauma

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Introduction: Although the relationship between obsessive compulsive disorder (OCD) and psychosis is a noteworthy phenomenon, the limits of the two disorders have not been defined. Eisen and Rasmussen (1993) evaluated a total of 475 patients with OCD and 14% were identified as having psychotic symptoms in addition to OCD. They classified the patients into 4 groups: 6% OCD without insight, OCD and schizophrenia (4%), OCD and delusional disorder (2%), OCD and schizotypal personality disorder (3%) (1). In clinical observation it is seen that, the shift from an obsession to a delusion is described when insight into obsessive signs is lost and resistance abandoned. These delusions do not signify a schizophrenic diagnosis but represent reactive affective or paranoid psychoses (3).

Case: A 32 year old single man, who has not been a soldier, presented with aggressive, contamination, sexual, need for symmetry, somatic obsessions; checking, washing, counting, need for confession compulsions; thinking he was followed by the secret service, sense of anal burning, and inability to sleep. His mood and affect were anxious, speech increased, and associations were dispersed. He had a history of sexual abuse by his brother. Obsessive symptoms started at the age of 12, feeling some problems about his gender, anxiety about his future, sleeplessness and not talking to people at 16. After 15 days he had talked about the sexual abuse with her mother, who died because of a myocardial infarction and he started to blame himself. He lost 15 kg in 6 months and started to experience auditory and visual hallucinations. He was treated with many antipsychotics, SRIs, TCAs, and benzodiazapines. He had a hypomanic attack under the treatment of aripiprazole. In the Rorschach test he showed schizoid reactions and dissociation in 2003. He was hospitalized 2 times. At his last visit his treatment was sertraline 200 mg/day and olanzapine 5 mg/day. The appearance of the psychotic symptoms occurred, when the depressive symptoms started. Olanzapine was increased to 10 mg/day after sleeplessness and psychotic symptoms flared up. The last Rorschach test assessed the patient as being in pregenital organization and requiring close control of affective and psychotic symptoms.
Discussion: The clinical observations emphasize the interest in OCD patients with psychosis, who are neglected often. The shift from an obsession to delusion is triggered by stress and is generally transient (2). The strong association between psychotic features and depressive features in OCD may also have important implications in the treatment strategies (3). OCD represents a psychopathological spectrum varying along a continuum of insight and requires careful clinical observation and treatment.
Key words: Obsesive compulsive disorder, psychosis, sexual trauma

References:

1. Eisen JL, Rasmussen SA. Obsessive-compulsive disorder with psychotic features. J Clin Psychiatry1993; 54(10):373-379.
2. Özerdem A. Obsesif-Kompulsif Bozukluk ve Psikoz Üzerine Bir Gözden Geçirme. Klinik Psikiyatri 1998;2:98-102
3. Khess CDJ, Das J, Parial A et. al. Obsesive Compulsive Disorder with psychotic features.Hong Kong J Psychiatry1999;9(1): 21-25

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[PP-077] Ref. No: 304

Priapism associated with zuclopenthixol treatment: A case report

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Background: Priapism is pathologically prolonged and painful penis erection, usually without sexual desire or stimulation. Priapism is classified as veno occlusive low flow (ischemic) and arterial high flow (non ischemic). The low flow–ischemic type is the most common type of priapism and if it is untreated, leads to irreversible ischemic cavernosal tissue changes. The causes include generally certain medications, although the mechanism for drug-induced priapism is unknown (1-4).
Here we discuss, in light of the literature, a 62-year-old- male paranoid schizophrenic patient, who had been treated with oral zuclopenthixol since 1995 and developed an acute and painful erection.
Case: It was revealed that the patient, who presented with priapism, that hadcontinued for a week, took zuclopenthixol 20 mg a day for 2 days prior to the veno occlusive priapism.
After emergency urological treatment, the psychiatric examination revealed paranoid psychosis. Zuclopenthixol was stopped and risperidone 6 mg/day and biperiden 4 mg/day were prescribed. A week later he was discharged from hospital.
Discussion: In many cases it has been reported that psychotropic drugs may cause priapism. Some of them are trazadone, chlorpromazine, haloperidol, zuclopenthixol, olanzapine, ziprasidone, and clozapine (3). Although the mechanism of priapism associated with antipsychotics is not clear, it is thought to be related to blockage that is mediated by the alpha receptors in the corpora cavernosa of the penis (3). Similarly, the capacity of zuclopenthixol to induce priapism is thought to be due to its antagonist activity on alpha-1 adrenergic receptors (1,3).
Therefore it is important that clinicians must take notice of side effects of antipsychotics, including rarely seen ones.
Key words: Zuclopenthixol, priapism, side effect, drug induced, antipsychotics

References:

1. J Salado, A Blazquez, R Diaz-Simon, F Lopez-Munoz, C Alamo and GG Rubio Priapism associated with zuclopenthixol: Ann Pharmacother June 1, 2002 vol. 36 no. 6 1016-1018
2. Brichart N, DElavierre D, Peneau M, İbrauhim H, Mallek A. Priapism induced with antipsychotic medications: a series of four patients. Prog.Urol. 2008 Nov; 18 (10): 699-73.Epub 2008 Jun 10.
3. Sood S, James W and Bailon MJ. Priapism associated with atypical antipsychotic medications. a review. Int Clin Psychopharmacol 2008; 23: 9-17

4. Şükrü Kartalcı, Işıl Göğceğöz Gül, Rıfat Karlıdağ, Birgül Elbozan Cumurcu Recurrent priapism during quetiapine treatment case report; Bulletin of Clinical Psychopharmacology, Vol: 20, N.: 4, 2010 327-328

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[PP-078] Ref. No: 113

Prescribing patterns and inappropriate use of medications in patients referred to doctors in Ardabil City of Iran

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Objective: To determine the drug use patterns and descriptive analysis of prescriptions among patients who visited doctors in Ardabil City.
Methods: A retrospective study was carried out on 2000 randomly selected prescriptions from all registered prescriptions in Ardabil City using data from two insurance organizations. Data were obtained on demographics, prescribing indicators and potentially inappropriate medications. The collected data were analyzed by descriptive statistical methods using SPSS software.
Results: From all prescriptions, 822 (41 %) were for men and 1178 (59%) were for women. The mean age of the subjects was 31.6 ± 21.3 years ranging from 1 to 91. On thousand three hundred and six (65.3%) of all prescriptions were from general practitioners and others from specialists. The mean number of drugs per prescription was 3.58±1.3 ranging from 1 to 9. Dexamethasone, with 219 (24.7 %) prescriptions, was the most commonly prescribed medication. The total number of medications prescribed in all the prescriptions was 7158 while the mean number of medications per encounter was 3.6. Antibiotics, with 52.8% of the prescriptions, were the most prescribed drug group.
Conclusion: The results showed that the mean of prescription drugs per encounter and the rate of prescription injection drugs were more than the global standards. Also, the pattern of prescription drugs was inappropriate. It is necessary to reduce irrational prescription of drugs to patients by monitoring and control indicators of medical doctors who prescribe higher numbers of prescriptions.
Key words: Pattern, drug utilization, inappropriate medications

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[PP-079] Ref. No: 305

Bipolar affective disorder and normal pressure hydrocephaly: A case report

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Background: The subject of this study was how affective disorders are related to structural changes in the brain. The use of lithium in affective disorders can cause pseudotumor cerebri, which has been reported in the literature, although there is no information about the occurrence of normal pressure hydrocephalus. We detected normal pressure hydrocephalus in a patient diagnosed with bipolar affective disorder 10 years ago and treated with lithium.
Case: A 55 year-old woman, housewife, not working, lives in Istanbul with her husband and children. She was diagnosed with bipolar affective disorder 10 years ago and treated with lithium. She had hand tremors, weakness and dizziness and was admitted to hospital. The patient was dehydrated, walking with small steps, showed balance difficulty and urinary incontinence. The patient was admitted to the psychiatric unit. A neurology consultation and cranial MRI were requested. The patient was thought to have normal pressure hydrocephalus. Lumbar puncture was performed twice. The patient was diagnosed with arrested hydrocephalus; CSF flow could not be identified. A CSF dynamic MRI was requested and the patient was transferred to neurosurgery.
Discussion: There are publications about the relationship between structural brain abnormalities and affective disorders. Hydrocephalus, by definition, is the accumulation of CSF in the ventricular system due to an imbalance between production and absorption of CSF. Presenting symptoms include memory impairment, urinary incontinence symptoms, and ventriculomegaly (2,3). The etiology of normal pressure hydrocephalus can include head trauma, metabolic problems, endocrinopathies, infectious and immunological conditions; danazol, tamoxifen, oxytocin, tetracycline, indomethacin, lithium, drugs such as retinol are mentioned (2.4). Normal pressure

hydrocephalus is not known to be associated with lithium in the literature. Lithium is known for its relationship with pseudotumor cerebri. Taking into account the patient saw benefits from lithium, it was decided to postpone to a change to the mood stabilizer.

Key words: Bipolar affective disorder, lithium, normal pressure hydrocephalus, structural brain abnormalities

References:

1. Arnone D, Cavanagh J, Gerber D, Lawrie SM, Ebmeier KP, McIntosch AM. Magnetic resonance imaging studies in bipolar disorder and schizophrenia: meta-analysis. BJPsych 2009; 195:194-201.
2. Görgülü O, Yurt A, Özer FD, Turan Y. Normal basınçlı hidrosefali ön tanılı 26 hastanın analizi. Demans Dergisi 2003; 3:117-120.
3. Kempton MJ, Geddes JR, Ettinger U, Williams SCR, Grasby PM. Meta-analysis, Database, and Meta-regression of 98 Structural Imaging Studies in Bipolar Disorder. Arch Gen Psychiatry. 2008;65:1017-32.
4. Levine SH, Puchalski C. Pseudotumor cerebri associated with lithium therapy in two patients. J Clin Psychiatry. 1990; 51:251-3.

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Agmatine attenuats cognitive impairment and oxidative damage following chronic unpredictable mild stress: A behavioral, biochemical, and histological study

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Agmatine (l-amino-4-guanidinobutane) is an endogenous polycationic amine synthesized by the decarboxylation of arginine by the enzyme arginine decarboxylase and hydrolysed by agmatinase. Agmatine has been quantified in nearly all organs including brain. It has been proposed to act as a novel neuromodulator in the mammalian brain. Previous studies have shown that endogenous agmatine interacts with a number of receptor subtypes such as, imidazoline, 2-adrenergic and N-methyl-D-aspartate. It also blocks other ligand-gated cationic channels, including nicotinic receptors, and inhibits all three isoforms of nitric oxide synthase. Although there are papers showing that agmatine may have a modulator role in learning and memory, the question of whether it is able to reverse impaired learning and memory still remains. This study was planned to investigate the effect of agmatine on cognitive functions and oxidative damage following chronic unpredictable mild stress (CUMS).

Rats were allocated to the following study groups: animals not exposed to CUMS (control group, n=12), animals exposed to CUMS for 5 weeks (CUMS group, n=12), animals exposed to CUMS and treated with agmatine (CUMS+Agmatine Group, n=12). The control and CUMS groups were injected with saline and the CUMS+Agmatine group was injected with agmatine 40 mg/kg, i.p. daily throughout the experiment. CUMS was applied according a previous study with a minor modification. Briefly, the CUMS and CUMS+Agmatine groups were subjected to different types of stressors: restraints for 4 h, cage tilting for 24 h, wet bedding for 24 h, swimming in 40C cold water for 5 min, swimming in 45 C hot water for 5 min, pairing with another stressed animal for 48 h, level shaking for 10 min, nip tail for 1 min, and inversion of the light/dark cycle for 24 h. These nine stressors were randomly applied for 5 weeks. The rats received one of these stressors per day and the same stressor was not applied continuously for 2 days so that animals could not predict the occurence of stimulation. After 5 weeks, animals were tested in the passive avoidance (PA) and Morris's water maze (MWM) tasks to evaluate learning and memory functions. At the end of the experiment, the brains of the rats were either removed freshly for malondialdehyde (MDA), glutathione (GSH) levels and myeloperoxidase (MPO) activity or removed with 4% paraformaldehyde perfusion for c-fos, glial fibrillary acidic protein (GFAP) and brain-derived neurotrophic factor (BDNF) determination immunohistochemically in cortex and hippocampus.

There was a significant defect in cognitive functions of the CUMS group whereas agmatine treatment significantly reversed this effect both in the PA and MWM tests. A decrease in GSH and an increase in MDA and MPO levels in the CUMS group were significantly inhibited with agmatine treatment, which were considered markers of oxidative damage. In the immunohistochemical experiments, it was found that c-fos and GFAP were overexpressed and BDNF was decreased in the CUMS group whereas data for the agmatine treatment group were similar to those of the control group. The findings of the current study clearly showed beneficial effects of agmatine on cognitive impairment and oxidative damage in CUMS.

Key words: Agmatine, BDNF, c-fos, chronic unpredictable mild stress, GFAP, malondialdehyde, glutathione, myeloperoxidase

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[PP-081] Ref. No: 308

Ceruloplasmin levels before and after treatment in patients with depression: A case-control study

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Objective: Ceruloplasmin is a serum protein synthesized by hepatocytes and involved in both copper and iron metabolism. It is an acute phase reactant and has antioxidant capacity (1). Deficiency of ceruloplasmin is thought to cause neural cell damage secondary to decreased mitochondrial energy production and increased lipid peroxidation, and iron associated free radicals (2,3). Ceruloplasmin, an antioxidant agent, has previously been investigated in some psychiatric disorders like schizophrenia and obsessive compulsive disorder (4). Studies about ceruloplasmin in depression are relatively scarce (5). In this prospective study, we aimed to determine the serum ceruloplasmin levels of depressive patients before and after treatment, to compare them those of healthy control subjects and to assess any possible association of ceruloplasmin levels to treatment response.

Methods: Among the admissions to the Psychiatry Outpatients Clinic of Gaziantep University Medical Faculty Hospital 19 (8 males, 11 females) patients who were diagnosed with major depressive disorder according to the DSM-IV criteria and 40 (17 males, 23 females) healthy control subjects have been included in the study. The patients received naturalistic antidepressant treatment during the 8 weeks period after the diagnosis. The serum ceruloplasmin levels and the Hamilton Depression Rating Scale (HAM-D) scores of the patients were measured before and after the 8 week period of antidepressant treatment. Blood collection for ceruloplasmin measurement was done only once for the healthy control subjects. The measurement of ceruloplasmin levels was conducted according to the standard procedures.

Results: The ceruloplasmin levels of patients both before and after antidepressant treatment were significantly higher than those of control subjects ($t=7.569$, $p<0.001$ and $t=6.764$, $p<0.001$, respectively). Despite clinical improvement, ceruloplasmin levels did not show any statistically significant change after antidepressant treatment in the patient group ($t= -1.163$, $p=0.260$).

Conclusion: Compared to healthy control subjects, serum ceruloplasmin levels seemed to be higher in patients with depression. There was no significant change in its level with antidepressant treatment. High levels of serum ceruloplasmin, an antioxidant agent, may be a consequence of some mechanisms that try to balance increased oxidative stress which was previously shown in patients with depression. The persistance of high levels of serum ceruloplasmin after antidepressant treatment may show some ongoing possible underlying pathophysiological mechanisms in depression despite its acute treatment.

Key words: Antioxidant, depression, oxidative stress, ceruloplasmin

References:

1. Floris G, Medda R, Padiglia A, Musci G. The physiopathological significance of ceruloplasmin. A possible therapeutic approach. Biochem Pharmocol 2000; 60: 1735-1741
2. Yoshida K, Kaneko K, Miyajima H, Tokuda T, Nakamura A, Kato M, Ikeda S. Increased lipid peroxidation in the brains of aceruloplasminemia patients. J Neurol Sci 2000; 175: 91–95
3. Vassiliev V, Harris ZL, Zatta P. Ceruloplasmin in neurodegenerative diseases. Brain Res Brain Res Rev 2005; 49: 633-640
4. Vırıt O, Altındağ A, Selek S, Yumru M, Bulut M, Erel O, Savaş HA, Herken H. Increased plasma ceruloplasmin levels in schizophrenia. Bulletin Of Clinical Psychopharmacology 2008; 18: 282-287
5. Bekaroğlu M, Bilici M, Değer O, Karaman SC, Örem A, Soylu C. Effect of Antidepressant Treatment on Acute Phase Protein Levels in Patients with Depression. Turkish Journal of Psychiatry 1997; 8: 260-265

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Foetality in schizophrenia

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Objective: The aim of this study was to evaluate common morphological and neurological features of schizophrenia from an ontogenetic perspective and to propose a new conceptual approach to schizophrenia, in which early foetal marks persist without diminishing in comparison to other people.
Material and Methods: Fifty patients diagnosed with schizophrenia from the Bakırköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery were chosen for the study group. The control group consists of fifty healthy male subjects. The ages of all subjects varied between 18 and 65. All of the subjects were informed about the study and their written consents were obtained. Sociodemographic data of all subjects were recorded and the Waldrop Minor Physical Anomalies Scale, the NES (neurological evaluation scale), and the Edinburgh Handedness Inventory were applied.
Results: We found significantly higher scores among schizophrenic patients in comparison to healthy subjects both in the NES total and all four sub-categories of the scale. The minor physical anomalies scores, head circumference, and hypertelorism were significantly higher in the schizophrenic group. In addition, for hand-eye dominancy, we observed more tendency to be crosswise.
Conclusion: Some characteristics of schizophrenia such as hypertelorism, large head circumference, high palate, thin muscle and bone structure, primitive reflexes, mental and behavioral characteristics could be evaluated as a separate ontogenetic entity.Evaluating schizophrenia within the context of a neurodevelopmental hypothesis, as an evolutionary process, in which foetal traits persist, would contribute to our understanding of the disorder's ambigous nature and phenomenology.
Key words: Schizophrenia, foetality, ontogenesis

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Metabolic changes in the acute phase with olanzapine treatment

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Introduction: Atypical antipsychotics are used in treatment of psychotic disorders and severe behavior disorders. Despite the lack of extra pyramidal side effects, they cause metabolic disorders (such as hyperlipidemia, weight gain, glucose intolerance), which are important causes of mortality (1). The exact mechanisms of these side-effects of atypical antipsychotics have not been identified so far and therefore and protective measures could not be established (2). In this study we aimed to examine the acute phase changes in blood lipid profile and body mass index while using olanzapine.
Materials and Methods: Twenty four patients, who were diagnosed with first-episode psychotic disorder and received olanzapine treatment in the Department of Psychiatry, Gulhane Military Medical Faculty, were enrolled in the study. The serum lipid levels and fasting blood sugars were measured before the treatment and four weeks after the treatment; body mass index was calculated and the data obtained were compared.
Results: The comparison of pre- and post-treatment data showed significant increases in the weight gain, measurement of waist circumference, body mass index, total cholesterol, and VLDL levels ($p < 0.05$). There were statistically no significant changes in fasting blood glucose, HDL, LDL, and TG levels.
Discussion: It is reported that the reason of differences in severity of metabolic changes occurring due to the use of atypical antipsychotics is variation of the genes that encode metabolizing enzymes, transporters, and receptors (3,4). In this study, the changes occurred within four weeks may be predictors of developing long-term metabolic disorders and so that protective measures can be initiated. Identifying the individual differences will contribute to the treatment regimens when weight gain can be detected early in the treatment.
Key words: Atypical antipsychotic, metabolic, olanzapine

References:

1. Jin H., Meyer J.M., Mudaliar S., Jeste D.V., 2008. Impact of atypical antipsychotic therapy on leptin, ghrelin, and adiponectin. Schizophrenia Research 100 (2008) 70–85.
2. Yazıcı K. Yazıcı A., 2008. Weight Increase Induced by Antipsychotic drugs:What is the role of genes? Bulletin of Clinical Psychopharmacology 2008;18:59-70.
3. Chagnon YC. Susceptibility genes for the side effect of antipsychotics on body weight and obesity.Curr Drug Targets 2006; 12: 1681-1695
4. Evans WE, Johnson JA. Pharmacogenomics: the inherited basis for interindividual differences in drug response. Annu Rev Genomics Hum Genet 2001; 2: 9-39

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[PP-084] Ref. No: 183

Do cultural factors effect clinical manifestations of OCD? Clinical features of a Turkish sample

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Objective: In the present study we evaluated the clinical characteristics of OCD patients monitored in an outpatient program and compared them with other cultures.

Method: The study included 116 OCD patients who presented to the clinics at the Bakirköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery, met the inclusion criteria, volunteered to participate in the study after being diagnosed and were referred by two psychiatrists. The diagnosis was confirmed using the Structured Clinical Interview Form for the DSM-IV Axis I Disorders (SCID-I). An inquiry form was developed for obsessive compulsive symptoms based on the obsessions and compulsions included in the Yale-Brown Obsession Compulsion Scale (Y-BOCS) according to their incidence and a sociodemographic form from the SCID-I clinical interview guide.

Results: Our sample consisted of 30 male (25.9%) and 86 female (74.1%) patients. The mean age was 34.96±10.23 years. The most common obsessions were impurity-contamination (49.1%), followed by doubt (20.7%) and religious (11.2%) obsessions. Secondary obsessions included doubt (53.4%), impurity-contamination (14.7%) and sexual obsessions (9.5%), respectively. In tertiary obsessions, 21 patients reported presence of symmetry-exactness (18.1%), 13 patients reported doubt (11.2%), 10 patients reported sexual (8.6%) obsessions, and 43 patients (37.1%) had no tertiary obsessions (Table 1). Ninety-six percent of patients had accompanying compulsions. The most common compulsions were cleaning and washing (53.4%), checking (26.7%) and repetitive ritual behavior (7.8%).DISCUSSION: The most common obsession in the present study was impurity/contamination with a rate of 49.1% in line with the literature, followed by doubt obsessions of 20.7%. The most common compulsion reported in literature is washing accompanied by obsession of contamination, and it is followed by checking. Similarly, in our study, the primary compulsion was cleaning and washing with a rate of 53.4%, followed by checking (26.7%) and repetitive ritual behaviors (7.8%). Although the first two obsessions and compulsions are in line with the literature, the tertiary obsessions reported as aggressive or sexual obsessions in the literature were replaced by religious obsessions (11.2%) in our sample. An intercultural study showed that religious obsessions were the most common obsessions with 60% in the Egyptian sample, and 50% in the Saudi sample. However, the rate of religious obsessions was 6% in the U.S., 5% in the United Kingdom, and 11% in India. Studies on Jewish populations showed similar results with the Muslim populations, with a religious obsession rate of 50%. We believe that the rate of religious obsession is associated with our country's position, being at the junction of Western and Eastern cultures. Relatively lower rate of sexual obsessions compared to the literature may result from the fact that obsessions related with sexuality may be more difficult to report than other obsessions in our population.

Key words: Clinical manifestation, cultural differences, OCD

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Reliability and validity of Turkish version the Brief Fear of Negative Evaluation Scale II (BFNE-II) among male patients with alcohol dependency

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Background and Objective: The construct of fear of negative evaluation consists of feelings of apprehension about others' evaluations, distress over these negative evaluations, and the expectation that others will evaluate one negatively (1). The Brief Fear of Negative Evaluation Scale (BFNE) is a measure of a person's tolerance for the possibility they might be judged disparagingly or hostilely by others (2). The aim of this study was to determine the reliability, validity and factorial structure of the Turkish translation of the BFNE-II in male alcohol dependent inpatients.

Methods: Participants were 155 consecutively admitted male alcohol dependents. Patients were investigated with the BFNE-II, the Social Phobia Scale (SPS), the Social Interaction Anxiety Scale (SIAS) and the Liebowitz Social Anxiety Scale (LSAS). The BFNE-II was repeated in 136 of these 155 patients after 2 weeks.

The BFNE is composed of 12 items describing fearful or worrying cognition. Eight of the twelve items describe the presence of fear or worrying, while the remaining four items describe the absence of fear or worrying (3). In the BFNE-II (4) reversed items are corrected.

Results: The Turkish version of the BFNE-II was found to be compatible with the original scale. In alcohol dependents the internal consistency coefficient (Cronbach's alpha) was 0.91 for the BFNE-II. For each of the items, the corrected item-total correlation values were between 0.57 and 0.84 ($p<0.001$). Test–retest correlations were between 0.28 and 0.53 for items and 0.54 for the total score. The BFNE-II scores were correlated with three measures of social anxiety (the SPS, SIAS, and LSAS) providing evidence of convergent validity.

Conclusions: In the present study the Turkish version of the BFNE-II with 12 items and 2 factor solutions was found to be compatible with the original scale among substance dependent inpatients. Each subscale and the BFNE-II had adequate reliability in terms of internal consistency. The item-subscale and the corrected item-total correlation coefficient values were significant at moderate to high degrees and were stable over two weeks of testing. Finding the BFNE-II factors and total score correlated with related constructs such as the LSA, SPS and SIAS showed concurrent validity. This finding is consistent with previous research demonstrating a positive relationship between the BFNE and other measures of social anxiety (4). Also in support of the discriminant validity of the BFNE-II, individuals with social phobia scored significantly higher on the scale than non-anxious alcohol dependents. The differences in scores on the BFNE-II highlight the discriminant ability of the measure for detecting clinically significant levels of social anxiety. In general, the findings showed promising results and were comparable with most research findings throughout the world (1,2).

Key words: Alcohol abuse, fear of negative evaluation scale, social anxiety

References:

1. Watson D, Friend R. Measurement of social–evaluative anxiety. J Consult Clin Psychol 1969;33:448–457.
2. Leary MR. A brief version of the Fear of Negative Evaluation Scale. Pers Soc Psychol 1983; 9:371-375.
3. Carleton RN, McCreary DR, Norton PJ, Asmundson GG. Brief Fear of Negative Evaluation scale revised. Depress Anxiety 2006; 23:297-303.
4. Carleton RN, Collimore KC, Asmundson GJ. Social anxiety and fear of negative evaluation: construct validity of the BFNE-II. J Anxiety Disord 2007;21:131-41.

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[PP-086] Ref. No: 197

Reliability and validity of Turkish versions of the Social Phobia Scale and Social Interaction Anxiety Scale among male patients with alcohol dependency

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Objective: The Social Phobia Scale (SPS) was designed to measure social phobia defined as "anxiety and fear at the prospect of being observed or watched by other people, and in particular, where the individual expresses distress when undertaking certain activities in the presence of others" (1). TheSocial Interaction Anxiety Scale (SIAS) was designed to measure social interaction anxiety defined as "distress

when meeting and talking with other people'" (1). Thus the two companion measures were designed to distinguish between scrutiny fears and concerns about interaction. The scales correspond to the DSM-III-R descriptions of Social Phobia--Circumscribed and Generalised types, respectively. In this study, the reliability and validity of the Turkish translation of the Social Phobia Scale (SPS) and Social Interaction Anxiety Scale (SIAS) in male alcohol dependent inpatients were determined.

Method: The study was conducted with hospitalized patients between August 2008 and March 2009 in the Bakirkoy State Hospital for Mental Health and Neurological Disorders, AMATEM (Alcohol and Drug Research, Treatment and Education Center) in Istanbul. Participants were 155 consecutively admitted male alcohol dependents. Diagnoses of alcohol dependence and social anxiety disorder were made with the SCID-I modules of these disorders. Patients were investigated with the SPS, the SIAS (2), the Brief Fear of Negative Evaluation II (BFNE-II) and the Liebowitz Social Anxiety Scale (LSAS).

Results: The Turkish versions of both the SPS and the SIAS were found to be compatible with the original scales. In alcohol dependents, the internal consistency coefficient (Cronbach's alpha) was 0.92 for the SPS and 0.93 for the SIAS. For each of the items, the corrected item-total correlation values were between 0.21 and 0.68 ($p<0.001$) for the SPS and were between 0.48 and 0.80 ($p<0.001$) for the SIAS. Test–retest correlations were between 0.19 and 0.72 for items and 0.79 for the total score for the SPS and were between 0.26 and 0.73 for items and 0.85 for the total score for the SIAS. The SPS and SIAS scores were correlated with each other and with two measures of social anxiety, the BFNE-II and LSAS, providing evidence of convergent validity. According to the ROC analysis a cut-off point of 24 was appropriate for the SPS and 30 was appropriate for the SIAS.

Conclusions: The Turkish versions of these scales were found to be compatible with the original ones among male alcohol dependent inpatients. The results suggest that each scale had an adequate reliability in terms of internal consistency. The corrected item-total correlation coefficient values were significant at moderate to high degrees and were stable over two weeks of testing. Also the finding that the SPS and SIAS correlated with related constructs such as the BFNE-II and LSAS showed concurrent validity. The Turkish versions of the SPS and SIAS have been proven to be acceptable, reliable and valid measures of social phobia in male alcohol dependent inpatients.

Key words: Alcohol abuse, social anxiety, Social Phobia Scale, Social Interaction Anxiety Scale

References:

1. Mattick RP, Clarke JC. Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. Behav Res Ther 1998;36:455–470.
2. Heimberg RG, Mueller GP, Holt CS, Hope DA, Liebowitz MR. Assessment of anxiety in social interaction and being observed by others: the social interaction anxiety scale and the social phobia scale. Behav Ther 1992;23:53–75.

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[PP-087] Ref. No: 117

ECT in treatment of pathological gambling: A case report

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Pathological gambling is a disorder, the prevalence of which has been increasing continuously and it cannot be diagnosed easily. It can also be treatment resistant and restricts the individual's life increasingly. In studies related to pharmacological treatment of pathological gambling, SSRIs, mood stabilizers, antipsychotics and naltrexone have been used. In all these alternatives the response rate is below expectations. In the literature, there is no discussion about the use and results of ECT treatment of pathological gambling. Here, a case that has been diagnosed with pathological gambling and that received ECT treatment will be presented.

Key words: Pathological gambling, treatment, electroconvulsive therapy

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Venlafaxine-mirtazapine combination in the treatment of post traumatic stress disorder

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Introduction: Posttraumatic stress disorder (PTSD) is an incapacitating clinical syndrome characterized by intrusive recollections, emotional numbing and withdrawal, cue-related responses, and psychological and physiological hyperarousal. In the treatment of PTSD pharmacotherapy must be supported with psychotherapy to increase the success of treatment. In this study we aimed to evaluate the effect of venlafaxine-mirtazapine combination in the PTSD patients, who did not respond to antidepressant treatment at adequate dose for an adequate duration.
Material and Methods: The hospital records of the patients who were diagnosed with PTSD according to DSM-IV diagnostic criteria and did not respond to adequate doses of an antidepressant treatment for adequate duration were examined retrospectively. Data of the patients (n=28), whose treatment were venlafaxine- mirtazapine combination, were obtained. These data were IES-R, Hamilton Anxiety scale and Hamilton Depression Scale scores.
Results: IES-R score, Hamilton Anxiety, Hamilton depression scores of 28 patients who were diagnosed with PTSD were evaluated. A significant decrease in IES-R total, IES-R avoidance, Hamilton Anxiety and Hamilton depression scores ($p > 0.05$) with adequate dose and duration of venlafaxine-mirtazapine treatment were detected. The same change was not accompanied in IES-R hyperarousal and IES-R intrusive test scores.
Conclusion: Post-traumatic stress disorder treatment takes longer and sometimes becomes chronic. According to the results of this study, venlafaxine- mirtazapine combination can be used in the treatment of PTSD patients who did not respond to antidepressant treatment at adequate doses for an adequate duration.
Key words: Mirtazapine, posttraumatic stress disorder, PTSD, venlafaxine

References:

1. McDougall SJ, Widdop RE, Lawrence AJ (2004) Medial prefrontal cortical integration of psychological stress in rats. Eur J Neurosci; 20: 2430-2440.
2. Radley JJ, Rocher AB, Janssen WG, Hof PR, McEwen BS, Morrison JH (2005) Reversibility of apical dendritic retraction in the rat medial prefrontal cortex following repeated stress. Exp Neurol; [Epub ahead of print].
3. Kılıçoğlu A. Stress and effects of brain: A review. New Symposium Journal; July 2007, Volume 45, İssue 3

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Efficacy and 3-month follow-up of repetitive transcranial magnetic stimulation (rTMS) in treatment resistant depression: Three cases

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Introduction: rTMS(Repetitive Transcranial Magnetic Stimulation) is an effective non-invasive cortical stimulation method that is being used in the treatment of drug resistant major depressive disorder. The underlying mechanism of effect of rTMS has not been fully understood yet. Neuromodulation, neuroplasticity, and cortical excitability are the most accepted theories (1). Even though the post-treatment effect of rTMS in depression is well known, little is known about its lasting effect (2).Therefore in this report we investigated the effect of add-on rTMS treatment with 3 month follow-up after treatment in 3 outpatient cases diagnosed with drug resistant unipolar major depression.
Case 1: A 33 year-old female patient was diagnosed with major depressive disorder and received venlafaxine 300 mg/day for two years. An add-on 15 sessions of DLPFC rTMS (20 Hz, 110% MT, 1000p/d) was applied due to insufficient medication response. The MADRS and HAM-A scales were assessed before and the day following treatment and then 1 and 3 months after treatment. The MADRS scores were found to be 37, 11, 2 and 4, while the HAM-A scores were found to be 35, 9, 5 and 6, respectively.
Case 2: A 35 year-old male patient was diagnosed with major depressive disorder since age 12 and received escitalopram 20 mg/day for three months. An add-on 15 sessions of DLPFC rTMS (20 Hz,110% MT,1000p/d) was applied due to insufficient medication response. The

MADRS and HAM-A scales were assessed before and the day following treatment and then 1 and 3 months after treatment. The MADRS scores were found to be 28, 10, 5 and 5, while the HAM-A scores were found to be 33, 18, 7 and 6, respectively.
Case 3: A 44 year-old male patient was diagnosed with major depressive disorder since age 15 and received venlafaxine 375 mg/day and ziprasidone 40 mg/day for five months. An add-on 15 sessions of DLPFC rTMS (20 Hz,110% MT,1000p/d) was applied due to insufficient medication response. The MADRS and HAM-A scales were assessed before and the day following treatment and then 1 and 3 months after treatment. The MADRS scores were found to be 29, 9, 6 and 7, while the HAM-A scores were found to be 28, 13, 10 and 8, respectively.
Conclusion: Maintenance of improvement in major depression treatment has been another concern apart from efficacy of current interventions. rTMS is an effective method as monotherapy and also as add-on treatment of depression. In this study each of three patients responded favorably to rTMS. In the post-treatment course, significiant improvement was maintained at the 3-month follow-up. Given its relatively benign side effect profile, long lasting therapeutic effect, and more practical non-invasive application than ECT, we conclude that rTMS can be considered as an optional treatment before ECT in treatment-resistant depression patients.
Key words: rTMS, resistant depression, treatment, follow-up, maintenance

References:

1. Pell GS, Roth Y, Zangen A.Modulation of cortical excitability induced by repetitive transcranial magnetic stimulation: Influence of timing and geometrical parameters and underlying mechanisms. Prog Neurobiol. 2010 Nov 5.
2. Bortolomasi M, Minelli A, Fuggetta G, Perini M, Comencini S, Fiaschi A, Manganotti P.Long-lasting effects of high frequency repetitive transcranial magnetic stimulation in major depressed patients. Psychiatry Res. 2007 Mar 30;150(2):181-6.
3. Hadley D, Anderson BS, Borckardt JJ, Arana A, Li X, Nahas Z et all. Safety, tolerability, and effectiveness of high doses of adjunctive daily left prefrontal repetitive transcranial magnetic stimulation for treatment-resistant depression in a clinical setting. J ECT. 2011 Mar;27(1):18-25.

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The effects of brain-derived neurotrophic factor Val66Met polymorphism on executive functioning in patients with obsessive-compulsive disorder

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Objective: In the present study, we investigated the association between the brain-derived neurotrophic factor (BDNF) Val66Met polymorphism and performance on tests measuring executive functions in a sample of patients with obsessive-compulsive disorder (OCD).
Method: A total of 71 patients diagnosed with OCD by the DSM-IV criteria were included in the study. All patients were assessed using the Yale-Brown Obsessive-Compulsive Scale and the Hamilton Depression Rating Scale. Patients also performed the Wisconsin Card Sorting Test (WCST), the Trail Making Test part A (TMT A) and part B (TMT B), the Tower of London Test (ToL), the Verbal Fluency Test (semantic and lexical fluency) and the Stroop Test. Genomic DNA was extracted from whole blood. The single nucleotide polymorphism (G/A) leading to amino acid substitution at the 66 codon in the BDNF gene (dbSNP number rs6265) was screened by a polymerase chain reaction and restriction digestion analysis in the DNA samples. The performance of the patients on the neuropsychological tests of executive functioning was compared between the patients with Val/Val genotype and Met carriers.
Results: Subjects with Val/Val genotype and Met carriers (Met/Met or Val/Met genotypes) did not differ on socio-demographic and clinical factors, except for the age of onset of the illness, which was earlier in subjects with Val/Val genotype than Met carriers. The performances on the TMT B and TMT B-A, the Stroop Test, and the two measures of the ToL were found to be significantly lower in the Met-allele carriers, compared to the Val/Val group. There were no significant differences in the WCST and the Verbal Fluency Test performances between the two groups.
Conclusions: These findings suggest that the BDNF Met allele may be associated with poorer performance on neuropsychological tests of executive functions in OCD patiens.
Key words: Brain-derived neurotrophic factor, executive functions, obsessive-compulsive disorder, polymorphism

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Diagnostic confusion about OCD and schizophrenia: A case report

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Introduction: Both obsessions and delusions are based on wrong, absurd and extreme ideas and it is thought that they could be separated on the basis of the presence of insight. Between obsessions and delusions there is the protection of insight and the ability to resist compulsive thoughts and/or behaviors. The insight of obsessive patients against obsessions may be protected or completely lost (1). In this paper, the diagnostic process in a patient with OCD, who also had delusions, is discussed.
Case: A 30 year-old, married, female patient applied to the hospital with complaints of unhappiness, suspiciousness, self-reproach, thoughts of death, hearing noises and insomnia. The patient had a four year medical history. She considered her 6 year-old son as her "love." Four years ago she had sexual feelings towards her female collegues and she thought that her feelings were mutual and her thoughts could be read by them. During psychiatric examination, her thought content had Schneiderian symptoms such as paranoia, thought withdrawal, thought insertion, and reference delusion. Just after the hospitalization and evaluation, the patient was medicated with 6 mg/day risperidone and 2 mg/day biperiden for a preliminary diagnosis of schizophrenia. Later the preliminary diagnosis was changed to atypical obsessive-compulsive disorder and her treatment was changed to sertraline 200 mg/day, quetiapine 300 mg/day and clonazepam 2 mg/day. Due to the fact that after a 10-day period of improvement, her reference delusion and fear of death had restarted, and inappropriate affect was detected, a treatment regimen of pimozide 2mg/day, sertraline 200mg/day, clomipramine 75mg/day, clonazepam 2mg/day had been prescribed. The difference between the facts and the idea had been discussed through a cognitive approach. After 12 days, her affect recovered and obsessive thoughts decreased, therefore the patient was discharged from hospital on the previously mentioned treatment. After 2 months, there had been no psychotic symptoms, she had been able to cope with distress better and her psycho-social functioning had been fine.
Discussion: The frequency of psychotic symptoms in OCD was detected at the ratio of 0.7-12.3% in a former study and 14% psychotic symptoms and 4% schizophrenia was reported in another study. Thomsen and Jensen demonstrated that 5% of 135 OCD patients, who applied to the hospital for the first time, were later diagnosed as schizophrenic (3). Despite the psychotic nature of OCD that has been noticed for a long time, modern classification systems still refer to OCD as an anxiety disorder. Although the DSM-IV mentions poor insight in OCD, there has been no objective description for what degree of insight should be accepted as poor. The diagnostic criteria and treatment of schizo-obsessions and whether the patients who have schizophrenia and OCD comorbidity should be considered as schizo-obsessive disorder are still under discussion(2).
Key words: Comorbidity, differential diagnosis, obsessive compulsive disorder, schizophrenia

References:

1. Aydın A. Ceylan ME. Türkcan A. Şizofrenide Obsesif Kompulsif Fenomenler: Bir Gözden Geçirme. Klinik Psikofarmakoloji Bülteni 2008;18:222-234
2. Demir EY. Aslan S. Şizo-Obsesif Bozukluk: Tanı, Sınıflandırma ve Tedavi. Türkiye' de Psikiyatri 2005;7(1):38-43
3. Güleç G. Güneş E. Yenilmez Ç. Obsesif Kompulsif Belirtileri Olan Şizofreni Hastalarının Şizofreni ve Obsesif Kompulsif Bozukluk Hastaları İle Karşılaştırılması. Türk Psikiyatri Dergisi 2008;19(3):247-256

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Is vaginismus a specific phobia?

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Objective: Although vaginismus is classified under the title of "sexual pain disorders", its etiological roots are still controversial. It has been suggested that vaginismus should be considered as a phobic reaction resulting in an avoidance behavior due to a dominant fear of pain. It has also been argued that, in patients with vaginismus, other fears usually accompany the fear of pain during coitus. Excessive sensitivity particularly in the genital area is said to prevail in vaginismus. In our study, patients with vaginismus were compared to a healthy group

in terms of commonly seen phobias, amplified perception of somatic sensations and sensitivity to pain
Method: As a part of a different aspect of a vaginismus trial 40 subjects with vaginismus, who was referred to the Sexual Functioning Disorders outpatient clinic and agreed to take part in the study and 50 women of the control group who described penile penetration difficulty and pain during coitus, were evaluated. The participants were evaluated using a sociodemographic form developed by the researchers, the SCL-90-R (Symptom Checklist-90-Revised), and the Somatosensory Amplification Scale Halam and Hafner (1977) fear checklist. The data were analysed using the SPSS for Windows 10.0 statistical packet program and $P<0.05$ was considered to be significant.
Results: The subjective pain endurance and total SSAS scores were not statistically significant. In reported fear of pain, dryness, narrowness and pain during coituswas highly significantly different between the two groups. A statistically significant difference was found in the vaginismic group as compared to the control group when items in the Fear Questionnaire for Phobia 11 (Closed Small Rooms), Phobia 15 (Being in High Places), Phobia 37 (Seeing Others' Nausea or Vomiting), Phobia 41 (Seeing Blood) and Phobia 46 (Going to a Dentist) were assessed one by one. When the subscale scores were evaluated, a statistically significant difference was found only in the F subscale (Diseases and Injuries).
Discussion: It seemed from these results that the fear of feeling pain during coitus and the sensations of narrowness, dryness and pain during coitus are important variables contributing to the etiology of vaginismus. It was thought that the fear of pain during coitus and the fear of somatic injury might trigger a perception of threat and this could explain the muscle spasm used in the definition of vaginismus. The statistical significance of the high level of the fear of bleeding and the fear of a dentist, which might symbolize the fear of pain, was thought to indicate this relationship. Again, it was considered that the thoughts of bleeding during coitus and pain and the somatic injury following it might have a relationship with the high scores in the fear of disease and injury scale. As in all of the sexual function disorders, a diagnosis of vaginismus should also rely on evidence-based criteria rather than on a consensus of specialist views. We think that large-scale studies integrated with clinics are needed to obtain such evidence-based criteria
Key words: Vaginismus, phobias, pain threshold, amplified perception of somatic sensations

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Are personality traits helpful to predict psychosis?

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Objective: The aim of this study was to investigate the incidence and specificity of personality traits and personality disorders among patients with psychotic disorders. Making a comparison (regarding to personality traits) between patients with acute transient psychosis and patients with unipolar major depressive disorder with psychotic features was another aim of the study. The relationship between the variety of delusions and personality disorder clusters was also evaluated.
Methods: Fifty-one patients with Acute Transient Psychosis (ATP) (brief psychotic disorder n=25, schizophreniform disorder n=2, psychotic disorder NOS n=24), 41 patients with Major Depressive Disorder with Psychotic Features (MDDPF) and 47 healthy controls were evaluated with a structured interview form based onthe DSM IV (Structured Clinical Interview for the DSM IV, SCID-I, SCID-II). Also the PANSS (Positive and Negative Symptom Scale) and the HDS (Hamilton Depression Scale) were applied to the patients.
Results: Thirty patients with ATP (58.8%) showed at least one personality disorder comorbidity. The frequency of observed personality disorder clusters was cluster B (39.2%), cluster A, (31.4%), and cluster C (21.6%). The most common personality disorders among the patients with ATP were borderline (27.5%) and paranoid (27.5%). Twenty-two patients with MDDPF (48,9%) had at least one personality disorder comorbidity. The most frequent personality disorder cluster was cluster C (40%); followed by cluster B (20%) and cluster A (17.8%). When the two diagnostic groups were compared, cluster B, narcissistic, schizotypal and antisocial personality disorders were observed more frequently in the ATP group and the cluster C and avoidant personality disorders were more frequently observed in the MDDPF group. Paranoid delusions had higher rates in cluster A and other delusions (like jealousy, erotomanic, and mystic delusions) had higher rates in cluster B.
Conclusion: In spite of the high rates of personality disorders in both diagnostic groups, the same disorders were also observed in people with no personality disorders. ATP and MDDPF did not seem to have a relationship with any personality disorder. Nevertheless, some personality disorders (narcissistic, schizotypal, and avoidant) can contribute to ATP and MDDPF by different mechanisms. Performing a personality assessment after the first year of improvement of the post psychotic symptoms might have given more accurate results. On the other hand, it could be said that, personality traits may have an effect on delusions.
Key words: Psychosis, personality disorder, depression

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Switching to fluoxetine due to sertraline-induced urinary incontinence: A case report

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Urinary incontinence is involuntary leakage of urine. It is not life-threatening but adversely affects the quality of life (1). The patient usually complains about frequent or periodic urinary incontinence in small amount or just leakage.

Here we report a case of urinary incontinence induced with sertraline and resolved after sertraline was discontinued.

Case: A 38 year-old married female patient presented to our clinic with complaints such as boredom, avolution, and depression. In her history, there was no psychiatric treatment or treatment with any other medications. On her psychological examination, she was cooperative, oriented, replying to questions briefly and properly. Her affect was depressive. The patient was diagnosed with depressive disorder and prescribed sertraline 50mg/day. She was suggested to come to the clinic for follow up after 3 weeks, however she came back a week later complaining of urinary incontinence. Without any pressure feeling, she developed urinary incontinence which negatively affected her daily activities. Her medication was changed to fluoxetine 20mg/day from sertraline 50mg/day. Her urinary incontinence complaint disappeared 2 days after. On the follow-up the patient did not have any urinary incontinence.

We presented a case report of urinary incontinence, which developed after starting sertraline. In the literature, there are case reports about sertraline induced urinary incontinence and switching to fluoxetine (1,2).

Despite extensive research, the mechanism of enuresis has not been clarified in detail. Continence is maintained by alpha-adrenergically mediated constriction of the bladder sphincter (3). Sertraline has alpha-adrenergic blockage, which may partially explain urinary incontinence in our case.

Enuresis is usually underdiagnosed because of clinicians do not ascertain about it or the masking of this side effect by multiple drugs such as antimuscarinic or noradrenergic agents (3).

Fluoxetine may be a choice in sertraline induced urinary incontinence cases in the treatment of depression and anxiety disorders. Larger case series are needed on this issue.

Key words: Urinary incontinence, sertraline, fluoxetine

References:

1. Votolato NA, Stern S, Caputo RM: Serotonergic antidepressants and urinary incontinence Int Urogynecol J Pelvic Floor Dysfunct 2000;11:p 386–8.
2. Maalouf Fadi T, Gilbert Andrew R. Sertraline-Induced Enuresis in a Prepubertal Child Resolves after Switching to Fluoxetine. J Child Adolesc Psychopharmacol 2010;20:161
3. Andersson KE: Advances in the pharmacological control of the bladder. Exp Physiol 1999;84:195–213

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The relationship between the serum bilirubin levels and metabolic syndrome in schizophrenia patients

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Objective: Especially with the use of atypical antipsychotics, the increase of the metabolic side effects constitutes a major problem in schizophrenia patients. Serum bilirubin levels have been reported to be associated with insulin resistance, abdominal obesity, and metabolic syndrome (MS) (1,2). However, the relationship between MS parameters and bilirubin levels has not been investigated in schizophrenia patients. It has been reported that antipsychotic drugs do not cause significant changes in serum bilirubin levels (3).

The objective of this study was to investigate the association between bilirubin levels and the parameters associated with MS in

schizophrenia patients.
Methods: Ninety one schizophrenic patients (38 female, 53 male) receiving antipsychotics for at least one year were included in the study. The parameters associated with MS were as follows: Body mass index, body weight, waist circumference, systolic and diastolic blood pressure, fasting blood glucose, insulin, serum triglycerides, HDL cholesterol levels, and the insulin resistance as calculated by using the value HOMA (homeostasis model assessment). The criteria were based on ATP-III criteria for metabolic syndrome (Adult Treatment Panel III). Statistical analysis was performed by using SPSS 17.0 (for Windows).
Results: Serum triglyceride levels were inversely correlated with serum direct bilirubin (p=.006) and positively correlated with indirect/direct bilirubin ratio (p =. 002). Serum HDL levels (p=.018) showed a significant positive correlation with indirect/direct bilirubin ratio.
Waist circumference (p=.048) showed a significant negative correlation with serum total bilirubin. The levels of insulin (p =.038) and value of HOMA (p =.015) were inversely correlated with serum direct bilirubin.
The rate of metabolic syndrome was significantly lower in the patients with highest quartile (75-100) of the serum direct bilirubin levels than the other quartiles (p=.022).
In these patients, the ratio of the patients that meet criteria for metabolic syndrome according to levels of the fasting triglyceride (p=.013) and HDL (p=.040) was significantly lower than others. Additionally, the means of body weight (p=.026), waist circumference (p=.022), and serum triglyceride levels (p=.039) of these patients were found significantly lower.
Conclusions: In this study we found that bilirubin levels are associated with metabolic syndrome and its parameters and high levels of serum direct bilirubin may be associated with the lower risk for MS in schizophrenia patients; similar to the healthy individuals (1,2,4). Our study is the first study investigating this issue. Our results may be important for the following aspects: High serum direct bilirubin levels may serve as an easily applicable, inexpensive marker indicating lower MS risk for schizophrenic patients. Additionally, it may be possible to prevent antipsychotics induced metabolic side effects by avoiding the drugs with higher risk for MS, in the patients with low levels of direct bilirubin. Due to the relatively limited number of patients and cross-sectional nature, our results required to be confirmed by longitidunal studies with larger samples.
Key words: Schizophrenia, metabolic syndrome, bilirubin, antipsycotic drug

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Olanzapine abuse: A case report

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Introduction: Olanzapine is a thienobenzodiazepine which specifically blocks 5-HT2A and D2 receptors and additionally blocks muscarinic (M1), H1, 5-HT2C, 5-HT3.5-HT6, a l, and D4 receptors. It has greater affinity for 5-HT2 receptors than for D2 receptors (Kelly, Conley & Carpenter 2005). Olanzapine has consistently been found to be significantly superior to placebo and comparable with, or superior to, haloperidol for the treatment of overall, positive, and negative symptoms of schizophrenia. In this case, we want to report a case of olanzapine abuse.
Case Report: A 48-year old, primary school graduate, married, female patient was admitted to our psychiatry clinic with tachycardia, insomnia, and anxiety. In psychiatric assessment, she mentioned that her symptoms have been similar for 15 years and in the last 3 years she has used citalopram 40 mg/d and olanzapine 10 mg/d and after this treatment her symptoms decreased. During psychiatric treatment when her consequent doctor wanted to stop the olanzapine treatment, she did not succeed and the patient had anxiety, insomnia, and anger and reported decreased symptoms after using the drug again
Discussion: Besides medications with obvious abuse potential such as benzodiazepines and methyphenidate and other stimulants, abuse of a number of commonly prescribed psychiatric medications has been reported. The abuse of anticholinergic drugs was first reported in 1960 with the description of a patient, who increased her trihexyphenidyl to achieve antidepressant and euphoriant effects. Recently, abuse of quetiapine for its sedative and anxiolytic effects has been reported. The abuse risk of quetiapine has been also reported in our country and Kaya et al. studied the abuse risk of quetiapine with prisoners. In the literature there are only two cases of olanzapine abuse.
Key words: Abuse, olanzapine

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Various reasons for self-destructive acts and objects used to commit them in 1991

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Objective: The objective of the research was to study and assess the reasons for self-destructive acts committed by the individuals that underwent outpatient forensic psychiatric examination in 1991 and to give a brief characteristic of the objects used to commit the self-destructive acts.
Methods: The statistical method and comparative analysis were employed to study the historical data of 30 archive acts of outpatient forensic psychiatric examinations covering the period of January-March, 1991.
Results: The analysis of the archive of acts revealed 30 males aged between 15 and 51 (the age range of 20 and 41 dominated). The reasons for committing self-destructive acts by the examined individuals who underwent outpatient forensic psychiatric examination in 1991 included the following: Conflicts with people around them (in 12 patients), conflict situations with parents and other close relatives (sister, brother, wife) (in 5), conflicts with inmates in place of imprisonment (in 4), conflict situations during military service (for example, a self-destructive act was committed by a serviceman to be closer to his parents house) 9in 3), an effect of command hallucinations in 2, ongoing investigation (in 1), conflict with loved ones (woman) (in 1), protest (investigator refused to allow relatives to visit the patient) (in 1), and severe headache in combination with high blood pressure (the suicide was attempted to ease the pain) (in 1). Also according to the archive documents of forensic psychiatric examination 18 out of 30 individuals used sharp, cutting, or piercing objects (razor, kitchen knife, or pen knife, glass, fragment of a broken mirror, wire, sharpened coin, cigar case, etc.), 3 individuals used washing line or belt, 3 patients used a medicine in tablet form, 1 individual used a medicine in liquid form, and 1 patient used the effect of low temperatures (long deliberate stay in cold weather in winter).
Conclusion: The research findings demonstrated that the most common reasons for self-destructive acts committed by the examined patients in 1991 were conflict situations with individuals, out of prison, and in the society rather than conflicts in place of imprisonment or in place of military services. The objects used to commit self-destructive acts included: Sharp, cutting, or piercing objects (most often razor and kitchen knife), washing line, and a medicine in tablet form (antibiotics, phenazepam, cyclodolum, etc.).
Key words: Self-destructive acts, outpatient forensic psychiatric examination, archive documents

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Topiramate induced acute psychotic disorder

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Introduction: The use of topiramate has increased in recent years. It is now used in several specialties to treat a wide range of medical conditions. A small number of case reports describes psychosis as an adverse event of topiramate. While using topiramate as an option for treatment-resistant epilepsy, clinicians need to be aware of the possibility of topiramate-induced psychosis in patients who have not previously had a psychotic episode. Although there is a small literature in neurology journals regarding psychiatric adverse events in epileptic patients, the psychiatric literature is silent about the topic. We report a patient without a previous history of psychosis, who developed psychosis after use of topiramate.
Case: The patient on multiple antiepileptic drugs with refractory tonic-clonic epilepsy was prescribed topiramate. The patient developed definite psychotic symptoms including auditory halucinations and paranoid-persecutory delusions and other behavioral symptoms fifteen days after beginning topiramate. The psychotic and other psychiatric symptoms resolved quickly with discontinuation of topiramate and by using a second-generation antpsychotic drug.
Discussion: Topiramate was originally discovered as an oral hypoglycaemic, afterwards was approved as an anticonvulsant agent and is now used as an adjunct to various treatments. The several mechanisms of action include inhibition of sodium conductance, decreased frequency of generated action potentials, activated gamma-aminobutyric acid activity, inhibition of AMPA receptor, and weak inhibition of carbonic anhydrase (1). The mechanism underlying psychotic symptoms induced by topiramate is not clear, but overactivity of

ascending dopaminergic pathways due to GABAergic inhibition of the substantia nigra has been proposed (3). The true prevalence of topiramate-induced psychosis is not known. Although there have only been a few case reports of topiramate-induced psychosis, an antiepileptic drug survey group found the incidence to be 1.5% in 596 patients (2). The risk of this side effect may be greater in the general population as studies of topiramate exclude patients with past psychiatric history and past psychiatric history is the most important predictor for psychiatric adverse events. As epilepsy could overlap with psychiatric conditions at a rate of 50-60% including mood, anxiety, and psychotic disorders, clinicians should be cautious in diagnosing drug–induced psychosis.

Key words: Topiramate, antiepileptic, drug-induced psychosis

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[PP-099] Ref. No: 170

Glass-aating behaviour with radiological findings: A pica case

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Pica is the persistent, compulsive ingestion of non-nutritive substances, which includes eating disorders with unusual cravings. Etiologies of consumption of common and bizarre substances range from mineral deficiencies and helminthic infestations to cultural preferences. Recently, pica has been linked to obsessive-compulsive (OCD) spectrum disorders.

Although there are few epidemiological studies and likely underreporting by embarrassed patients, pica exists in all ages, races, genders, and geographical regions. Lower socioeconomic groups, young children, pregnant women, or nursing mothers with increased nutritional demands are at higher risk, as well as those with brain damage, epilepsy, mental retardation, psychosis, or dementia.

Case Report: A 32-year-old, primary school graduate, unemployed, male patient referred to psychiatry clinic with glass eating behavior for 10 years. There was not any history of psychiatry referral before the development of glass eating craving. He was referred to psychiatry clinic with this craving and had difficulty to quit eating glass. In psychiatric examination we found cleaning and control obssessions. The cranial MRI showed decrease in size of in corpus callosum, enlargement in Sylvian fissure and sulcus, asymmetry in III. and lateral ventricules.

Discussion: In literature we did not a pica case like this one regarding glass eating. Even most pica cases are associated with element deficiency in our case there was not any deficiency. Because of obsessive symptoms, it might be associated with obsessive spectrum disorders with radiological findings. In OCD spectrum disorders, pica should also be considered and radiological investigation must always be done.

Key words: Obsessive compulsive spectrum, pica, corpus callosum

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The use of bupropion in treatment Kleptomania's: Two cases

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Objective: Kleptomania is an impulse control disorder, which is characterized by one's uninterrupted impulse of stealing objects that needed neither for use nor for value, in a repetitive uncontrollable manner (1). Studies stated that those with kleptomania are accompanied by other psychiatric conditions such as mood disorders, other impulse control disorders, or substance abuse and addiction (2).

For the treatment, selective serotonin reuptake inhibitors, mood stabilizers, and opioid receptor antogonists have been shown to be effective. In recent years, treatment for pathological gambling and trichotillomania as other impulse control disorders in which naltrexone and bupropion were studied for effective treatment of pathological gambling and trichotillomania, bupropion has been found to be as effective as naltrexone (3-4).

The effectiveness of bupropion for treatment of kleptomania, which is classified as an impulse control disorder, is discussed on two cases in this report.

Case 1: A 34 year-old married, women, graduated from high school presented with fatique, stress, lack of motivation, and complaints of staying in house, which lasted for the last two months in March, 2011. She had been stealing objects which were not important for her or she didn't need for a year. She stated that she felt joy during kleptomanic behaviour and later felt guilty and depressed and she could not leave the house.

She had substance abuse history and had been treated for major depression.

SCID-I revealed she had major depressive disorder recurring type and kleptomania.

For treatment, bupropion was given 150 mg/day initially, then increased to 300 mg/day. The depressive symptoms were apperently reduced in 8th week of the treatment. In 12th week, psychiatric examination revealed that functionalty, stealing impulse, and behaviour healed clearly.

Case 2: A 25 year-old single,women, graduated from high school presented with hypersomnia, eating too much, lying, suicide thoughts, and stealing things that she didn't need. Kleptomanic behaviour had begun one year ago.

She was told to be overweight when she was 8 year-old and tried to commit suicide when she was attending to secondary school. She had been shopping compulsively for 3-4 years.

SCID-I revealed that she had major depressive disorder recurring type and kleptomania.

Bupropion 150 mg/day was started initially, then 300 mg/day was given for treatment. The depressive symptoms were reduced markedly in the 10th week of the treatment. Desire and impulses to steal, hyperphagia, and suicide thoughts were found to be treated.

Discussion: There are studies (3-4) showed bupropion to be effective for treatment of pathological gambling and trichotillomania, both of which are impulse control disorders. We investigated the effectiveness of bupropion treatment in two cases, who had kleptomania and co-existing mood disorder. To our knowledge this is the first case report bupropion is used for kleptomania treatment. Larger and controlled studies on kleptomania would make it possible to understand the pharmacotherapy and etiology of this disorder better.

References:

1. Hocaoğlu Ç, Kandemir G. The use of SSRI (Selective Serotonin Reuptake Inhibitors) in kleptomania's treatment: case reports. Bulletin of Clinical Psychopharmacology 2004;14:204-8.
2. Bayle FJ, Caci H, Millet B, Richa S, Olie JP. Psychopathology and comorbidity of psychiatric disorders in patients with kleptomania. Am J Psychiatry 2003;160(8):1509-13.
3. Bhanji NH, Margolese HC. Alternative pharmacotherapy for trichotillomania: a report of successful bupropion use. J Clin Psychiatry 2004;65(9):1283.
4. Dannon PN, Lowengrub K, Musin E, Gonopolski Y, Kotler M. Sustained-release bupropion versus naltrexone in the treatment of pathological gambling: a preliminary blind-rater study. J Clin Psychopharmacol 2005; 25(6):593-6.

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A randomized, double-blind, placebo-controlled trial of celecoxib augmentation of sertraline in the treatment of a drug-naïve women with major depression

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Objectives: A growing body of evidence strongly suggests that inflammatory process and immune responses are involved in the pathophysiology of depression. While depression itself is considered a heterogeneous disorder, the involvement of immune system further complicates the matter.

Meanwhile, several antidepressant medications (e.g. fluoxetine) have been reported to exert immunomodulatory properties, which may affect human immune system and may partly contribute to their efficacy. Moreover, it must be noted that immune response/system profoundly varies between the genders due to differences in sex hormones. However, there have been no controlled studies investigating the benefits of celecoxib augmentation therapy in treatment-naïve women with depression.

To increase the homogeneity of the study population, the present study was designed to examine the antidepressant effects of celecoxib augmentation of sertraline in the treatment of female drug-naïve patients with depression for 8 weeks.

Methods: Forty female patients diagnosed with first episode of major depression according to DSM-IV-TR criteria were recruited for this

study. The inclusion criteria were: 1. First episode of major depression, 2. Female gender, 3. Antidepressant-naïve, 4. Age between 18 and 50 years, and 5. Hamilton depression rating scale (17 items) score ranging from 18 to 36. The patients with history of other psychiatric disorders, significant suicidal ideation, liver and kidney dysfunction, and cardiovascular disorders were excluded. The patients were randomly assigned into two equal groups receiving either sertraline 50-100 mg/day plus celecoxib 100 mg twice daily or sertraline 50-100 mg/day plus placebo twice daily. The participants were assessed by Hamilton depression and anxiety rating scale at baseline, and 4th and 8th weeks of the treatment. The data were analyzed by Mann-Whitney U test and Fisher's exact test. The trial was registered in Iranian Registry of Clinical Trials (IRCT registration number: IRCT201009043106N3). This study was approved by Azad University Pharmaceutical Sciences Ethics Committee (No: 4114).

Results: No significant differences were observed between two groups regarding demographicals characteristics and the Hamilton depression score at baseline. The mean Hamilton depression score decreased from 26.14 (SD=5.51) at baseline to 12.42 (SD=5) at 4th week and from 26.22 (SD=5.38) at baseline to 17.33 (SD=5.24) at 4th week in the celecoxib and placebo groups, respectively. Celecoxib group showed significantly greater decrease in Hamilton scores compared to placebo ($P< 0.05$) at the end of week 4. The mean decrease in Hamilton score was greater in the treatment group compared to placebo over 8 weeks, although it was not statistically significant. In addition, remission rate (HamD scores <= 7) was significantly higher in the celecoxib group compared to placebo group (57% and 11% respectively, $P<0.05$).

Conclusion: It can be suggested that celecoxib augmentation therapy may accelerate the onset of therapeutic action of sertraline and also result in higher remission rate at the endpoint of treatment. The results of present study substantiate the hypothesis that add-on treatment with anti-inflammatory agents can be beneficial in the management of depression.

Key words: Inflammation, depression, COX-2 inhibitor, augmentation therapy

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[PP-102] Ref. No: 180

To compare marital conflicts, between divorced and normal couples in Sirjan of Iran

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Objectives: Marriage is supposed to be a holy agreement and union between couples. The healthy relationship between a couple is a source of growth, maturity, and enlightenment. Unfortunately, some marriages are not only the source of peace and joy, but also can be the origin of stress and conflict and at the end may lead to mental and physical disorders.

Comparing marital conflicts and emotional reactions between the couples exposed to divorce and normal ones in Sirjan.

Method: This research is causal-comparative and was conducted in Sirjan in 2010. Seventy couples who had applied for separation and 70 normal couples in community health center were chosen at random and according to duration of marriage. A marital conflict questionnaire including seven dimensions was completed by volunteers, the data were collected and analyzed by SPSS.

Results: The results showed that two groups, including the couples that applied for divorce and normal ones, were similar regarding average of age, number of children, work time, and the duration of marriage. Comparing the average of marital conflict scores between two groups illustrated the score was higher in couples who applied for divorce (100.97 ± 20.1) in comparison with the other group (76.48 ± 18.67) and a significant correlation was detected also between two groups, one of seven dimensions were different significantly ($P<0.05$).

Conclusion: The results showed that the marital conflicts and emotional reactions were higher in couples who applied for divorce and these conflicts may increase divorce risk. We suggest more social support and family consulting in the community are needed and must be expanded.

Key words: Mental disorder, marital conflict, divorce

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Adult primary enuresis nocturna: A case report

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Introduction: Nocturnal enuresis (bed-wetting) is a hereditary, medical condition, which effects both children and adults (1). Beside this there is few studies on pevalance of enuresis nocturna (EN) among adults. EN cases are seldomly reported. Although most of the patients recover spontaneusly from EN, in the resistant cases illness persist through adulthood (2). The patients who have frequent bed-wetting in their childhood have greater risk for persistence of symptoms (3).
Case: A 29-year-old single, male patient does not work. The patient has been suffering from bed-wetting at nights, 2-3 times per week since his early childhood. He reports that he never had a long period free from bed-wetting at nights. He was suffering from bedwetting only at nights and never had daytime wetting. The patient reported that bedwetting becomes more frequent when he was under stress or felt unhappy about something and decreased in frequency when he felt less stressed out. While his military service, for a short period his symptoms had stopped when his millitary service was over his symptom has started again. In last six months, after he has suffered from thoughts of worthlessness, relationship issues with his father, and some economic problems his bed-wetting frequency increased. After his first application to the Erenkoy Mental Health Training And Research Hospital outpatient clinic, a consultation with a neurologist and a urologist was planned. He had been examined separately by a urologist, a neurologist and a psychiatrist. Several investigations had been performed in which they could not detect any organic disease. These investigations included urine analysis, abdominal USG, cranial MRI, and EEG. According to the results of these investigations, organic etiology was ruled out and 25 mg/day imipramine had been commenced. Later we increased imipramine dosage to 50 mg/day and added behavioral homework to the treatment. In his familiy history, there were similar symptoms in his brother wich had persisted until age 15th, and in his cousin which had persisted until he turned to 19 years old. The treatment response of the patient was good; his compliance with pharmacological treatment and behavioral therapy techniques was good.
Discussion: Our case, according to DSM-IV-TR diagnostic criteria, was fulfilling the criteria for enuresis nocturna and major depressive disorder on axis I. His problems about his functionality and his relationship with his father have caused an increase in his depressive symptoms and his bed-wetting. We think that patient's good response to treatment is related to his high motivation in his first psychiatric application and his compliance with behavioral threapy. It is compatible with literature data that the relatives of the patient have similar symptoms.
Key words: Enuresis nocturna, imipramine, behavioral therapy

References:

1. Yaluğ İ, Ünsalan N, Özten E, Öztep Kuruoğlu S, Tufan AE. Erişkinde ikincil enürezis nokturna: Bir olgu sunumu. Anadolu Psikiyatri Dergisi 2006; 7:185-190
2. Burgu B, Gokce MI, Gucuk A, Soygur T. Prospective evaluation of factors affecting the response and relapse rates to desmopressin therapy in male monosymptomatic enuretic adults. Urology 2009; 74: 915–919
3. Yeung CK, Sihoe JD, Sit FK, Bower W, Sreedhar B, Lau J. Characteristics of primary nocturnal enuresis in adults: an epidemiological study. BJU Int 2004; 341-345

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Major depressive disorder and the 5-HTTLPR in Spanish and Mexican populations

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Preliminary evidence of an increased risk of suffering from MDD for individuals carrying the 5HTTLPR S allele was described in 70 Spanish patients [1].
The present study aimed to analyze the potential relevance of the 5-HTTLPR genotypes and the risk of suffering from MDD in Mexicans

and Spaniards.
One hundred and twenty-two (70 previously analyzed) white Spanish and 101 Mexican Mestizo patients with a diagnosis of MDD (DSM-IV) were studied. Additionally, 327 Spaniards and 153 Mexican Mestizo healthy volunteers were also studied by a previously reported PCR method [1]. Genotypes and allele frequencies were compared between MDD patients and HVs by two-tailed Fisher's test.
The frequencies of 5HTTLPR LL, LS and SS genotypes in the Spanish population (MDD vs. HV) were 19.7 vs. 28.8%, 54.9 vs. 50.5% and 25.4 vs. 19.9 %. In the Mexican Mestizo population the frequencies in the MDD vs. HV groups were 14.9 vs. 18.3%, 49.5 vs. 55.6%, and 35.6 vs. 26.1% for 5HTTLPR LL, LS, and SS genotypes, respectively. The frequencies of 5-HTTLPR genotypes of the four groups (MDD and HV from Spain and Mexico) corresponded to those predicted by the Hardy–Weinberg law.
The odds ratio associated with the 5-HTTLPR-S allele were 1.72 (95% CI: 1.04-2.85) and 1.28 (95% CI: 0.64-2.55) for the MDD in comparison with the HV group in Spaniards and Mexicans, respectively.
The frequency of S was higher than the frequency of L allele in both MDD groups. In the Spanish population, the S allele was significantly higher ($p<0.05$) in MDD (52.9%) than in HV (45.1%). However, in the Mexican Mestizo population, the S allele was higher in the MDD group (60.4%) compared to HV (53.9%), but this difference was not significant. Moreover, the frequency of 5-HTTLPR-S allele in the Spanish HV (45.1%) was higher ($p<0.05$) than Mexican Mestizo HV (53.9%).
The S allele of 5HTTLPR is related to risk of MDD in both populations. In addition, we have found differences in the frequency of 5-HTTLPR-S allele between Spaniards and Mexican Mestizo populations.
Grants: Supported by grants from the Spanish Ministry of Health Instituto de Salud Carlos III and EU-FEDER PI10/02758, CP06/00030 (PD); AEXCID (9IA006) Junta de Extremadura and EU-FEDER (BS10023) and Consejo Nacional de Ciencia y Tecnología de México (Nº 59366). This work was coordinated by Network Red Iberoamericana de Farmacogenética y Farmacogenómica (CYTED206RT0290).

References:

1. Dorado P, Penas-Lledo EM, Gonzalez AP, Caceres MC, Cobaleda J, Llerena A. Fundam Clin Pharmacol 2007;21:451-3.

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Phenytoin toxicity in a pediatric epileptic patient and CYP2C9, CYP2C19, and ABCB1 genetic polymorphisms

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Pharmacogenetic studies have shown that genetic defects in drug-metabolizing enzymes encoded by CYP2C9 and CYP2C19 genes and by the transporter ABCB1 gene can influence phenytoin plasma levels and toxicity. Present findings support the previously established relationship between CYP2C9, CYP2C19, and ABCB1 genetic polymorphisms and the increased risk to develop phenytoin toxicity due to high plasma concentrations. Nevertheless, while the association of these genes with phenytoin-induced adverse effects has been well documented in adult populations, this is the first report examining the influence of these genetic polymorphisms on phenytoin plasma levels and toxicity in a pediatric patient.
The patient reported here is a 2-year-old girl with a medical history of cryptogenic or probably symptomatic epilepsy. At age 13 months, she had a first focal seizure with secondary generalization. At age 20 months, she was admitted to the Emergency Department because generalized convulsive Status Epilepticus (SE) needing rectal diazepam (0.5 mg/kg), intravenous diazepam (0.3 mg/kg), and intravenous phenytoin with a loading dose of 15 mg/kg and a maintenance dose of 5 mg/kg/day. The convulsive SE with generalized tonic clonic seizures lasted a total time of 30 minutes and stopped 15 minutes after the loading phenytoin dose was infused. Two hours after the first intravenous phenytoin dosage was given, the patient was found to have dizziness, nystagmus (lateral and vertical), ataxia, and excessive sedation. Phenytoin toxicity was suspected and phenytoin plasma levels were determined. The patient was back to treatment with oxcarbazepin (30 mg/kg/day) and she has been seizure-free since then.
Pharmacogenetic analyses were conducted in order to examine whether CYP2C9, CYP2C19, and ABCB1 genetic polymorphisms might explain the abovementioned phenytoin-induced neurological toxicity.
Pharmacogenetic analyses for the genes involved in phenytoin pharmacokinetics revealed that the patient was homozygous for the CYP2C9*2 allele, heterozygous for the CYP2C19*4 allele, homozygous for the 3435C and 1236C ABCB1 alleles.

Present data support CYP2C9 and CYP2C19 genotyping prior to phenytoin treatment in order to prevent adverse events. Consistently, for patients carrying CYP2C9 and CYP2C19 defective alleles, valproate instead of phenytoin should be recommended to treat SE.
Grant: The study has been partly supported by the Institute of Health Carlos III-FIS and the European Union (FEDER) Grants, PI10/02010 and CP06/00030 (P Dorado) and from PRIS Extremadura, Consejería de Sanidad y Dependencia, FundeSalud PRIS10043. This study was coordinated in the networks CIBERSAM and CAIBER, which are initiatives of ISCIII (Spain).

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Influence of CYP2D6 genetic polymorphism on fluoxetine and amitriptyline clinical response

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Cytochrome P450 2D6 (CYP2D6) is involved in the metabolism of many antidepressants. It is characterized by a high individual variability in catalytic activity mainly due to >75 CYP2D6 alleles that determine metabolizer status. The role of CYP2D6 genetic polymorphism in the metabolism of amitriptyline and fluoxetine was previously demonstrated [LLerena et al, 2004]. Herein, we analyzed the relevance of CYP2D6 genetic polymorphism for the clinical response to the antidepressant drugs fluoxetine and amitriptyline. Sixty-five patients (DSM-IV) diagnosed with major depression and a score equal or greater than 17 on the Hamilton-Depression (HAM-D) were prospectively studied. They were treated either with fluoxetine or amitriptyline under antidepressant monotherapy. The informed written consent was obtained from all patients. Clinical Response was evaluated with HAM-D. The patients were evaluated every month. A two months period evaluation is reported here. The patients with a 50% decrease on HAM-D were considered as "responders." CYP2D6 genotyping was assayed by PCR-RFLP and RT-PCR. The first month evaluation showed that 49 out of the initial 65 remained (16 dropped-out) in the study and second month evaluation showed that 41 patients remained (8 more dropped-out). Among responders there were 56.6% and 60% to fluoxetine, and 50% and 70% to amitriptyline, at first and second follow up evaluations, respectively. The responders were characterized by presenting one or two CYP2D6 active genes. Furthermore, the number of active genes was related to better clinical response in both drugs. The percentage of responders was higher for those with two active genes than for patients carrying just one: (a) fluoxetine, 81 % vs.18 % at first month; 87% vs. 13% at second month; (b) amitriptyline, 60 % vs.40 % at first month; 83% vs. 17% at second month. All ultrarapid metabolizers (n=3 UMs; those with more than two CYP2D6 active genes) were found to drop out during the first month. The only poor metabolizer patient in the study (PM; with none CYP2D6 active genes) was found among "non-responders" in both follow-up evaluations. The number of CYP2D6 active genes seems to be related to clinical response to the antidepressant drugs amitriptyline or fluoxetine. Among responders, the frequency of patients carrying two CYP2D6 active genes is higher than those with one copy. Moreover, UMs and PMs were not found in this group.
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Evaluation of insight and functional recovery in patients with schizophrenia

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Objective: Despite the fact that functional remission is the most important goal for the treatment of schizophrenia, standard definitions have not yet been made due to differences in measurement methods, the variability in the course of the disease, cognitive levels of the

patients, and psycho-social factors. Nevertheless, there exists an accumulation of knowledge regarding factors, which influence functional remission. Insight levels of patients influence their level of functionality, while causing problems in treatment adherence and social adaptation. The purpose of this study was to examine the factors which influence schizophrenia patients' levels of insight and functional remission.

Methods: In this cross-sectional descriptive study, 70 outpatients between the ages of 18-65, who applied to the Karadeniz Technical University, Psychiatry Clinic and were diagnosed with schizophrenia according to DSM-IV, were evaluated. The patients who reported they agree to take part in the study by signing the consent form were included in the study. The patients who had a history of traumatic brain injury and/or any disease which affects the central nervous system, whose Clinical Global Impression (CGI) disease severity low score was above four, who were taken as inpatients to the hospital in the last two months or whose treatment was changed were excluded from the study. The patients were evaluated by using respectively socio-demographic data collection form, clinical interview structured for DSM (SCID-I), the Positive and Negative Syndrome Scale (PANSS), Calgary Depression Scale (CDS), the Functional Remission of General Schizophrenia Scale (FROGS), Schedule for Assessing the Three Components of Insight (SAI-E), and cognitive test battery.

Results: Insight levels of the patients determined through the SAI-E, were found to be highly correlated with the PANSS positive, negative, and general psychopathology, Stroop Test, Controlled Word Association Test (FAS), and Trail Making Test A-B scores. In the regression analysis, PANSS total score, Stroop Test, and FAS scores were the predictors of insight.The FROGS functional levels of patients were found to be related with occupational status, sex, age of onset of illness, comorbid psychiatric illness, PANSS positive, negative, and general psychopathology, CDS, SAI-E, FAS, Trail Making Test, Stroop Test, and Wisconsin Card Sorting Test. In the regression analysis, occupational status, comorbid obsessive compulsive disorder, PANNS negative and general psychopathology, and FAS scores were the predictors of patients functional status.

Conclusion: Although insight levels of patients are basically related to cognitive functions, it has been reported in previous studies that clinical symptoms can cause changes in the levels of insight depending on the course of the disease. The relationship between insight and depression can vary depending on the severity of the depression, patients' defense mechanisms, and internalized stigma levels. The effects of clinical symptoms of schizophrenia, levels of cognitive function, and levels of insight and employment status on the patients' functionality levels are prominent.

Key words: Schizophrenia, functional remission, insight, cognitive functions

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Comparison of superoxide dismutase, glutathione peroxidase, and adenosine deaminase activities between respiratory and nocturnal subtypes of patients with panic disorder

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Background: Panic Disorder (PD) is a heterogeneous disease and panic attacks are divided according to the different symptom clusters as respiratory, nocturnal, nonfearful, cognitive, and vestibular subtypes. Oxidative stress (OS) is produced by free radicals which are named as reactive oxygen species (ROS). They can be evaluated indirectly by measurement of some antioxidant enzyme levels such as superoxide dismutase (SOD), catalase (CAT), or glutathione peroxidase (GSH-Px). PD is known to be associated with a high frequency of comorbid immunological and increased expression of T lymphocytes compared to controls. Adenosine deaminase (ADA) has been accepted as an important enzyme in the maturation and function of T lymphocytes. The aetiology of panic disorder is yet to be fully understood. There is mounting evidence indicating that ROS may have an important role in the pathogenesis of PD.

Objective: In the present study we aimed to compare SOD, GSH-Px, and ADA activities in panic disorder patients with/without nocturnal, respiratory subytypes, and healthy subjects. Thus to evaluate the effects of OS and inflammatory process on pathogenesis of PD and to determine biological parameters in the subtypes of PD.

Methods: The study comprised of 60 patients with PD and 30 healthy control subjects. Panic Attack Symptom Checklist (PASC), Panic and Agoraphobia Scale (PAS), Hamilton Depression Rating Scale (HAM-D), and Hamilton Anxiety Rating Scale (HAM-A) were administered to the patients. A nocturnal panic attack is defined as an abrupt waking from sleep in a state of panic attack. The respiratory subtype is four of the following five symptom criteria during an individual's most recent severe panic attack: Feeling of choking or smothering sensations; shortness of breath; chest pain or discomfort; numbness or tingling sensations; and fear of dying. The nonrespiratory subtype is operationalized as that which does not meet the mentioned symptom criteria. The biochemical analyses were made after all the blood samples were collected. The

laboratory analyses of investigation were conducted in Department of Medical Biology, Faculty of Medicine, at the University of Yuzuncu Yil.
Results: We found that SOD and GSH-Px blood activities of patients were significantly lower, and ADA activities of patients were higher than the healthy controls. All of the activities were not significantly different between respiratory and nocturnal subtypes. There were no significant relationships between the duration of illness and Panic-Agoraphobia (PAS) scores of patients with nocturnal subtypes. Hamilton Depression Rating Scale (HAM-D) and Hamilton Anxiety Rating Scale (HAM-A) scores of the patients with nocturnal subtype were significantly higher than the patients without nocturnal subtype. When examining the correlations between these variables and enzyme levels, there was only a positive correlation between duration of disease and serum activities of GSH-Px.
Conclusion: In conclusion, SOD and GSH-Px ADA activities of the patients with PD are different from healthy subjects. Our results suggest that oxidative and inflammatory processes may play role in pathophysiology of PD. These findings may support the idea that both nocturnal and respiratory subtypes of PD have different symptom clusters of the same disease.
Key words: Panic disorder, subtypes, oxidative stress

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The neural and cognitive effects of Bacopa Monniera: An fMRI study

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Objectives: Bacopa Monniera is an ayurvedic herbal medicine used in Indian medicine as a memory tonic. Animal models have shown that it is an antioxidant (1), a memory enhancer (2), and an antidepressant (3). Human trials have had variable results, but spatial memory, attention, and information processing tasks seem to be affected by Bacopa.
Given the improvements shown the RVIP task as a result of a 12 week Bacopa intervention, an fMRI methodology was employed to see how Bacopa affects the brain during this task. The improved performance in these tasks suggests Bacopa may modulate task specific brain regions. This investigation looks at the effects of Bacopa on the BOLD signal in the RVIP task over a 90 day intervention.
Method: The study utilized a double blind, placebo controlled, crossover design where all participants completed a 90 day course of both Bacopa (300mg daily) and placebo during the study. The participants were aged between 40 and 65 years and in good health. Interventions were separated by a 120 day washout period. Scans were undertaken on a 3T Siemens TRIO magnet before and after each 90 day intervention where participants would complete two runs of the task per scan visit.
The RVIP task is a block design which requires participants to respond when they see three odd or even numbers in a stream of numbers presented at 100/minute. The control block requires a response when a zero is seen in the stream of numbers. Blocks last for 1 minute and are repeated 3 times per condition in each of two experimental runs per scan.
Results: Data collection is ongoing at present. Baseline data show a bilateral increase in BOLD activation in the precentral gyrus and precuneus with activation extending to the left inferior frontal gyrus (n=7, p=.005) when compared with control using a task greater than baseline mask. Behavioural data suggest fewer 'hits' in the active task compared to control task.
Conclusions: The methodology of the study sets a gold standard for clinical trials using nutraceuticals and fMRI. Given the ongoing nature of the study, conclusions are merely speculative at this point. However, the task looks to be a sensitive reflection of sustained attention. We anticipate that the 90 day intervention of Bacopa will affect the BOLD signal in these particular regions of interest.
Key words: Bacopa monniera, fMRI, nutraceuticals, human cognition

References:

1. Bhattacharya et al (2000) Antioxidant Activity of Bacopa Monniera in Rat Frontal Cortex, Striatum and Hippocampus. Phytotherapy Research, 14, 174 – 179
2. Hota et al (2009) Bacopa monniera leaf extract ameliorates hypobaric hypoxia induced spatial memory impairment. Neurobiology of Disease, 34 (1) 23-39
3. Sairam et al (2001) Prophylactic and curative effects of Bacopa monniera in gastric ulcer models. Phytomedicine, 8 (6) 423-430

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Methlyphenidate induced thrombocytopenia in a pediatric patient with ADHD and stuttering

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Stuttering and attention deficit hyperactivity disorder (ADHD) can be seen together. Anemia or thrombocytopenia, rarely even pancytopenia may occur as a side effect of medications used to treat both disorders. Thrombocytopenia, although it may be seen in some cases using methylphenidate, occurs rarely. An 8 year-old boy was brought to our outpatient clinic by his family with the complaints of stuttering, attention deficit, and hyperactivity. After the psychiatric evaluation and history were conducted and psychometric tests were applied. One month later methylphenidate 18mg/day was started for the treatment of ADHD. Soon after initiation of medication, petechia developed on both lower extremities of the patient. CBC showed isolated thrombocytopenia and te patient was followed by hematology clinic. On the 6th day upon stopping mehtlyphenidate, the thrombocyte count returned to normal. We also discussed possible mechanisms of thrombocytopenia.
Key words: Isolated thrombocytopenia, petechia, methylphenidate

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Use of mirtazapine and olanzapine in treatment of major depressive disorder with psychotic features developed during pregnancy: A case report

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Objctive: To contribute to the of treatment of major depressive disorder with psychotic features developing during pregnancy
Case: A 25 year-old, married, female patient was 13 weeks pregnant and diagnosed with major depressive disorder (MDD) with psychotic features. She was a housewife with primary school degree and was admitted to inpatient unit. The obstetrician did not find any fetal anomalies. The patient was put on mirtazapine and olanzapine, doses of which ranged between 15-30mg/day and 5-10 mg/day, respectively during her two months hospitalization. In her follow up, 15 days after discharge, olanzapine dose was decreased to 5 mg/day, but mirtazapine was continued at 30mg/day until delivery. To decrease neural tube defect risk folic acid 5mg/day was prescribed during the treatment, as well. She gave birth to a live and healthy baby on the expected due date during her outpatient treatment.
The information regarding the safety of use of mirtazapine and olanzapine during pregnancy primarily rely on case reports. While there were no fetal abnormalities in majority of cases regarding olanzapine use (1,2), there are some reports including hip dysplesia (3), meningocele ve ankyloblepharon (4), atrioventricular channel defect and unilateral pes equinovarus (5). However, more cases and studies are needed to explore, whether these cases were coincidental or due to teratogenic effects of olanzapine. Currently available publications (6,7,8,9) report that major malformation risk in general population does not increase with the use of mirtazapine during pregnancy. The reports from our country are parallel to the reports in the literature (10,11).
Results: Even in majority of cases no fetal abnormalities were reported regarding olanzapine use during pregnancy, large case series are needed to have more evidence for stronger judgments. Also even mirtazapine does not look like a teratogenic agent, is should be used with caution during pregnancy and babies that are exposed to mirtazapine should be followed closely.
Key words: Depression, pregnancy, safety, mirtazapine, olanzapine, teratogenicity

References:

1. Littrell KH, Johnson CG, Peabody CD, Hilligoss N. Antipsychotics during pregnancy. Am J Psychiatry 2000; 157(8):1342
2. Mendhekar DN, War L, Sharma JB, Jiloha RC. Olanzapine and pregnancy. Pharmacopsychiatry 2002; 35(3):122-123
3. Spyropoulou AC, Zervas IM, Soldatos CR. Hip dysplasia following a case of olanzapine exposed pregnancy: a questionable association. Arch Womens Ment Health 2006; 9(4):219-222
4. Arora M, Praharaj SK. Meningocele and ankyloblepharon following in utero exposure to olanzapine. Eur Psychiatr 2006; 21(5):345-356

5. Yeshayahu Y. The use of olanzapine in pregnancy and congenital cardiac and musculoskeletal abnormalities. Am J Psychiatry 2007; 164(11):1759-1760
6. Lennestål R, Källén B. Delivery outcome in relation to maternal use of some recently introduced antidepressants. J Clin Psychopharmacol 2007; 27(6):607-613
7. Way CM. Safety of newer antidepressants in pregnancy. Pharmacotherapy 2007; 27(4):546-552
8. Djulus J, Koren G, Einarson TR, Wilton L, Shakir S, Diav-Citrin O, et al. Exposure to mirtazapine during pregnancy: a prospective, comparative study of birth outcomes. J Clin Psychiatry 2006; 67(8):1280-1284
9. Einarson TR, Einarson A. Newer antidepressants in pregnancy and rates of major malformations: a meta-analysis of prospective comparative studies. Pharmacoepidemiol Drug Saf 2005; 14(12):823-827
10. Yaris F, Kadioglu M, Kesim M, Ulku C, Yaris E, Kalyoncu NI, et al. Newer antidepressants in pregnancy: prospective outcome of a case series. Reprod Toxicol 2004; 19(2):235-328
11. Guclu S, Gol M, Dogan E, Saygili U. Mirtazapine use in resistant hyperemesis gravidarum: report of three cases and review of the literature. Arch Gynecol Obstet 2005; 272(4):298-300

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[PP-112] Ref. No: 253

Effects of group musical therapy on inpatients with schizophrenia: A preliminary study

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Background: Since ancient times, music has been used as a therapy method and has been considered to have some good effects on the human body and mental health (1, 2, 5). Music might have beneficial effects on human life such as physiological functions, quality of life, and psychosocial functioning. There is a wide acceptance about musical therapy practices for various disorders. This generalization may mean that schizophrenia patients could have some benefits from musical therapy, too (1- 3). There is not enough scientific evidence emphasizing the efficacy of musical therapy which is applied to severe mental disorders and has recovery potential for some deficits (2, 4).
Objectives: The first aim of this study was to examine the feasibility of music therapy for inpatients with schizophrenia, who need acute care and also to explore its effects on mental health, general psychosocial functioning, and satisfaction with patient care.
Method: Forty-five patients with schizophrenia were randomly assigned to a study group (n=15) and a control (n=30) group in a ward for female schizophrenia inpatients. Both groups received medication and standard care for their disorder. Additionally, the study group underwent group music therapy with classical Turkish music tones for twelve sessions over four weeks. The assessment included measures of psychotic symptoms using the Positive and Negative Syndrome Scale (PANSS), the Brief Psychiatric Rating Scale (BPRS), and quality of life and subjective satisfaction with musical experiences. All of the measurement tools were applied before the randomization and weekly until the study was completed.
Results: This study demonstrated that music therapy for schizophrenia inpatients, who need acute care because of psychotic excitation, is feasible. The comparison of the groups also showed that music therapy has significant advantages on improvement of interpersonal relationships and general psychosocial functioning.
Conclusions: This study is the first musical group therapy trial with classical Turkish music tones in schizophrenic patients. Musical activity diminishes negative symptoms, reduces social isolation, and improves patients' abilities to adapt to the social environment in the community after discharge from the hospital. Therefore, music therapy may increase the therapeutic alliance of schizophrenic patients in the long term.
Key words: Music therapy, schizophrenia, inpatient, quality of life

References:

1. Altınölçek H. Türklerde psikiyatrik hastaların rehabilitasyonunda müziğin terapötik etkileri. Popüler Psikiyatri Dergisi 2006; 34: 16- 19.
2. Talwar N, Crawford MJ, Maratos A, Nur U, McDermott O, Procter S. Music therapy for inpatients with schizophrenia: Exploratory randomised controlled trial. British Journal of Psychiatry 2006; 189: 405- 409.
3. Ulrich G, Houtmans T, Gold C. The additional therapeutic effect of group music therapy for schizophrenia patients: A randomised study. Acta Psychiatrica Scandinavica 2007; 116: 362- 370.
4. Hayashi N, Tanabe Y, Nakagawa S,et al. Effects of group musical therapy on inpatients with chronic psychosis: A controlled study. Psychiatry and Clinical Neurosciences 2002; 56: 187- 193.
5. Gold C, Heldal TO, Dahle T, Wigram T. Music therapy for schizophrenia or schizophrenia-like illnesses (Review). Cochrane Database of System Reviews. 2005, 2: 1- 20.

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Clinical correlations of childhood trauma and dissociation in a sample of female inpatients diagnosed with schizophrenia spectrum disorders and severe nonpsychotic disorders: the preliminary data

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Background: There is recent increasing interest in the relationship between early childhood trauma and the risk of developing psychotic experiences later in life (2,3). Although a large number of studies of psychiatric patients, a majority of whom have a psychotic disorder, indicate that the prevalence of childhood trauma in this group is high, whether childhood trauma is of etiological importance in psychosis remains controversial (1, 2, 4).
Objectives: In the present study, we aimed to investigate the possibility of a link between psychotic disorders and childhood traumatic experiences by comparing trauma exposure in a group of female patients with a diagnosis of psychotic disorders to a group diagnosed with severe non-psychotic disorders. The secondary purpose of this study was to examine the clinical correlations between trauma exposure, dissociative phenomena, and psychiatric symptomatology and psychosocial functioning for these two groups.
Methods: Patients with psychotic disorders, mostly schizophrenic (n=54), and with a non-psychotic diagnosis (n=24), were recruited at the Women's Clinic of the Istanbul Erenköy Mental Health Hospital. The data were collected through a semi-structured interview for demographic, psychiatric, and trauma histories. Psychotic symptoms were measured by using the Positive and Negative Symptom Scale (PANSS). At the main interview, the Childhood Traumatic Questionnaire (CTQ), Dissociative Experiences Scale (DES), Traumatic Experiences Checklist (TEC), and SCL-90-R were administered to all participants by psychiatrists, who were blind to trauma history.
Results: In this preliminary study, high prevalence rates of childhood traumatic experiences and dissociative phenomenon were found in a sample of consecutively admitted moderately ill psychotic inpatients. Another finding of the present study was that emotional abuse during childhood was most strongly correlated with the experience of dissociative symptoms in adult schizophrenia patients. Additionally, in this group a history of trauma was significantly related to somatization, poor communication skills, and depressive symptoms.
Conclusions: The results of this study are consistent with previous studies raising the possibility that such trauma is of etiological importance in schizophrenia and other related disorders (4-6).
Key words: Childhood trauma, dissociation, psychosis, schizophrenia

References:

1. Schafer I, Harfst T, Aderhold V, Briken P, Lehmann M, Moritz S, Read J, Naber D. Childhood trauma and dissociation in female patients with schizophrenia spectrum disorders an exploratory study. J Nerv Ment Dis 2006; 194: 135- 138.
2. Spence W, Mulholland C, Lynch G, Mchugh S, Dempster M, Shannon C. Rates of childhood trauma in a sample of patients with schizophrenia as compared with a sample of patients with non-psychotic diagnosis. Journal of Trauma & Dissociation 2006; 7(3): 7- 22.
3. Lysaker PH, LaRocco VA. The prevalence and correlates of trauma-related symptoms in schizophrenia spectrum disorder. Comprehensive Psychiatry 2008; 49: 330- 334.
4. Larkin W, Read J. Childhood trauma and psychosis: Evidence, pathways, and implications. J Postgrad Med 2008; 54(4): 287- 293.
5. Bendall S, Jackson HJ, Hulbert CA, McGorry PD. Childhood trauma and psychotic disorders: a systematic, critical review of the evidence. Schizophrenia Bulletin 2008; 34(3): 568- 579.
6. Morgan C, Fisher H. Environmental factors in schizophrenia: childhood trauma- a critical review. Schizophrenia Bulletin 2007; 33(1): 3- 10.

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Comparison of neurocognitive skills between generalized anxiety disorder and premenstrual dysphoric disorder patients: A controlled study

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Background: Recently, there has been increased interest in the ability of female reproductive hormones to impact psychoneurological processes involving the interplay of several body systems. This lends reliability to the view of premenstrual dysphoric disorder (PMDD)

as a disorder founded in real biochemical disturbances (1,2). Although the effects of the menstrual cycle on emotional state and cognitive function have been only recently systematically studied, they have long been recognized. Previously published studies yielded inconsistent data in terms of cognitive tests throughout the cycle phases (1, 3, 4).

Objective: This study aimed to compare the effects of cyclic reproductive hormonal changes on cognitive, emotional, and behavioral function in childbearing age female patients with generalized anxiety disorder (GAD) and those with premenstrual dysphoric disorder (PMDD).

Method: One of psychiatric samples was a group of PMDD (n = 42), and the other was a group of GAD patients (n = 36), who had 20 and higher on the Hamilton Anxiety Scale (HAM-A) score. An age matched healthy control group (n = 40) was also included in the study. The psychiatric rating scales were applied twice according to the menstrual phases. The frontal assessment battery, Stroop test, and Weschler verbal memory tests were applied for the evaluation of neurocognitive changes with respect to follicular and late luteal phases.

Results: There was a significant increase in dysphoric mood during the luteal phase in women with PMDD compared to their follicular phase and compared to the GAD women and the control group. Taken together with the repeated measures and the data analysis, the GAD group had significantly worse performance regarding overall neurocognitive functions in their luteal phase (particularly memory skills, attention, and psychomotor function) as compared to the PMDD group, whereas the control group had significantly better performance overall.

Conclusions: Even though neurocognitive impairments seen in the women with PMDD were partly due to the dysphoric mood during the late luteal phase, it seems to be related to the physiological and psychoneurological processes in which female reproductive hormones may have a central role.

Key words: Neurocognitive functions, premenstrual dysphoric disorder, generalized anxiety disorder, female reproductive hormones

References:

1. Farage MA, Osborn Thomas W, MacLean AB. Cognitive, sensory, and emotional changes associated with menstrual cycle: a review. Arch Gynecol Obstet. 2008; 278: 299- 307.
2. Reed SC, Levin FR, Evans SM. Changes in mood, cognitive performance and appetite in the late luteal and follicular phases of the menstrual cycle in women with and without PMDD (Premenstrual Dysphoric Disorder). Horm Behav. 2008; 54: 185- 193.
3. Morgan M, Rapkin A. Cognitive flexibility, reaction time, and attention in women with premenstrual dysphoric disorder. J Gend Specif Med. 2002; 5: 28- 36.
4. Morgan M, Rapkin AJ, D'Elia L, Reading A, Goldman L. Cognitive functioning in premenstrual syndrome. Obstet Gynecol. 1996; 88: 961- 966.
5. Resnick A, Perry W, Parry B, Mostofi N, Udell C. Neuropsychological performance across the menstrual cycle in women with and without premenstrual dysphoric disorder. Psychiatry Research 1998; 77:147- 158.

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[PP-115] Ref. No: 259

Evaluation of olfactory function and olfactory bulb volume in major depressive disorder

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Objective: The purpose of this study was to assess olfactory function and olfactory bulb volume in patients with major depressive disorder (MDD) in comparison to normal subjects.

Method: Twenty treatment-free premenopausal, 25-45 year-old women diagnosed with long-term, severe MDD at the Şişli Etfal Research and Teaching Hospital psychiatric outpatient clinics and 20 healthy women matched by age, education, smoking behavior, and frequency of upper respiratory tract infection participated in this study.

Odor threshold, discrimination, and identification functions were assessed by Sniffin' sticks. Olfactory bulb volumes were calculated by manual segmentation of acquired T2-weighted coronal slices according to a standardized protocol.

Results: When OB volumes of patients and controls were analyzed with a two-way Analysis of Covariance, with age and education as the covariate and group as a factor, the patients had significantly larger OBs than the controls (right $p=0.011$; left $p<0.001$; largest $p=0.008$). Education has a significant effect as a covariate in the OB volume X group analysis. Significant correlations between OB volumes in relation to olfactory function were observed in the control group; however, there was no correlation between OB volume and olfactory functions in the patient group.

Conclusion: Our results showed that OB volume gets larger in long-term MDD. According to our study and former knowledge it is possible that during MDD, the hippocampus, amygdala, and OB differ in terms of activity and volume to compensate for each other and stabilize the patient's mood.

Key words: Depression, neurogenesis, olfaction, volumetry

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[PP-116] Ref. No: 261

Fluoxetine induced hypomanic shift in a bulimic patient: A case report

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In the psychopharmacological treatment of bulimia nervosa (BN), antidepressants have a positive effect on mood and reduce the related preoccupation with body weight and the number of binge eating episodes. Research with antidepressants such as imipramine, desipramine, trazodone, phenelzine, amitriptyline and mianserin has been conducted to investigate their efficacy in the treatment of bulimia. A higher dose of the fluoxetine (60 mg/day) was shown to be effective in BN and has received FDA approval. Comorbidity of eating disorders with mood, anxiety, and substance use disorders is common. The presence of additional psychiatric disorders impairs compliance with treatment and makes treatment difficult by increasing severity and chronicity. The treatment of bulimia nervosa with fluoxetine is adversely affected by the presence of a mood disorder. High dose fluoxetine should be used for BN to be effective, but these high doses may increase the risk of a manic shift. When using fluoxetine in patients with a history of bipolar mood disorder (BiPMD) or a positive family history of BiPMD, clinicians need to be careful because of the possibility of a manic shift. There is not any developed algorithm for psychopharmacological treatment with comorbidity of BiPMD and BN; generally the use of agents that have a positive effect on both disorders is recommended, although such a medication is not available. Negative effects on weight gain or other negative interactions of mood stabilizers in BN, makes it difficult to use them. Like other antidepressants SSRIs may also cause a manic shift. The use of antidepressant doses of fluoxetine for mood and anxiety disorders are known to carry a risk for a manic or hypomanic shift. Hence, detailed examination of cases, where there is history of mood disorder or family history of mood disorder, is recommended. Using high dose fluoxetine in BN also increases the possibility of manic or hypomanic shifts. The use of fluoxetine 60 mg in a patient with BN caused a hypomanic shift, even though there was no history of bipolar disorder or a positive family history. A review of the treatment demonstrated that 60 mg of fluoxetine did not result in a significant decrease in symptoms and adequate treatment response. Retrospectively inadequate response to the treatment was associated with the presence of comorbid BiPMD.
Key words: Bulimia nervosa, fluoxetine, hypomania, mania

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[PP-117] Ref. No: 262

Schizophrenia and Mega Cisterna Magna: A case report

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The cerebellum, which is known in general as an organ to control coordination, balance, and fine motor movements, has been demonstrated to have an important role in cognitive functions by using anatomical and functional imaging methods. The anomaly of mega cisterna magna is one of the various lesions of the posterior fossa which can influence cerebellar functions like cerebellar hypoplasia/agenesis, vermis hypoplasia/agenesis, Dandy-Walker malformation or variant, persistent Blake's pouch, arachnoid cyst, Joubert syndrome, and tumors of the posterior fossa. Mega cisterna magna (MCM) is a developmental malformation of the posterior fossa, where morphologically the vermis and cerebellar hemispheres are intact. Associated structural brain anomalies are common with mega cisterna magna and especially, MCM may be a component of the Dandy-Walker variant (with cerebellum hypoplasia) or Dandy-Walker syndrome (with cerebellum agenesia). Our knowledge about the relationship between this anomaly and psychiatric disorders is limited to very few case reports available. In this article, we report a case of schizophrenia associated with mega cisterna magna. A 35-year-old married patient (house wife, graduated from primary school) was brought to our clinic by her relatives with complaints of disorganized and inappropriate speech, strange behavior, and fear of people. She had auditory and visual hallucinations and delusions of reference and persecution. Up to five months ago she had no psychiatric or neurological symptoms or history. Her symptoms began with social isolation, decrease of self-care, and positive psychotic symptoms. Neurological examination and EEG examination were normal, but mega cisterna magna was discovered in her cranial magnetic resonance imaging scan. The patient was treated with risperidone 6mg/day for four weeks and was discharged after remission of psychotic symptoms. The prevalence and prognostic significance of MCM has not been defined completely yet. Memory and verbal fluency were found to be lower in cases of mega cisterna magna than in controls. Schizophrenic patients are known to have problems of memory and verbal fluency, too. The role of the cerebellum in schizophrenia has been highlighted by Andreasen's hypothesis of 'cognitive dysmetria'. This hypothesis suggests

that the cerebellum has a role in the general dyscoordination of sensorimotor and mental processes which are seen in schizophrenic patients. The following observations demonstrating the involvement of the cerebellum are determined in studies of schizophrenic patients: high prevalence of neurological soft signs, dyscoordination, abnormal posture, balance problems, impaired eye blink conditioning and impaired adaptation of the vestibular-ocular reflex. Abnormal cerebellar activations have been showed in functional imaging studies. In the context of this case, the relationship of schizophrenia with cerebellar anomalies was reviewed.

Key words: Schizophrenia, mega cisterna magna, cerebellum, brain imaging methods

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[PP-118] Ref. No: 263

Congenital hypogonadism and comorbid anorexia nervosa in a male patient: A case report

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Male hypogonadism results from a failure of the testes to produce adequate androgen. Patients have low circulating testesterone in combination with clinical symptoms such as osteopenia, increased adiposity, decreased muscle mass, decline in energy and stamina, decreased cognitive function, decreased libido and erectile dysfunction. The cause may be primary (genetic anomaly) or secondary (defect in hypothalamus or pituitary), but often presents with the same symptomatology. Hypogonadal patients who are both symptomatic and who have clinically significant alterations in laboratory values are candidates for treatment. Testosterone replacement therapy is widely applied. The prevalence of eating disorders in men as compared to women is less than ten times and also shows differences in the course of the disease and the causes of its appearance. Social, genetic, psychological factors, personality traits and a history of trauma are considered to play a role in the development of anorexia nervosa (AN). In addition, steroid hormones affect the development of eating disorders and eating behavior. Homosexuality, asexuality and sexual role disorders are known to be more common in male patients with AN. AN is associated with notable medical complications and affects many systems like a general medical disease. One of the systems that is affected by AN is the genitourinary system; hypogonadism is one of the known complications of AN. Endocrine abnormalities such as hypogonadotropic hypogonadism mediate some of the clinical manifestations. Most of the endocrine changes that occur in AN are physiological adaptations to starvation and are usually reversible with weight gain. Prolonged AN or cachexia can cause hypogonadism. In this article we report a man, who had suffered from hypogonadism since infancy with no treatment and developed AN at age 18. Congenital hypogonadism with comorbid AN is a rare illness. As a result of the interaction of hypogonadism with anorexia nervosa the patient developed a sexual identity crisis, which is important in its clinical and theoretical aspects, since he suffered from delayed puberty, no secondary sexual characteristics, and no ejaculation or erection although he was 22 years old. Up to now only one case from Japan is reported in the literature with congenital hypogonadism and anorexia nervosa. Hypogonadism with comorbid anorexia nervosa has not been listed as a case in the Turkish indices yet.

Key words: Anorexia nervosa, congenital hypogonadism, male patient

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Review of diagnosis and treatment of pregnant psychiatric patients in a state hospital

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Background: Because of the physiological changes during pregnancy there are changes of pharmacokinetic and pharmacodynamic characteristics, and there are differences in the treatment of psychiatric disorders in this period.
Objective: The aim of this study was to evaluate the sociodemographical features, diagnoses, and treatments of 20 pregnant psychiatric inpatients that were hospitalized between August 2010 and August 2011.
Method: The sociodemographical features, diagnoses, and treatments of the patients were evaluated retrospectively.
Results: The percentages of diagnoses of the patients were as follows: schizophrenia 27.3%, bipolar affective disorder manic episode

22.7%, bipolar affective disorder depressive episode 9.1%, unipolar depression 27.4%, and obsessive compulsive disorder, dissociative disorder, and schizoaffective disorder, each 4.5%. When the treatments of the patients were evaluated according to their diagnosis we found that 13.6% of schizophrenia patients were treated with ECT, 9.09% with haloperidol and 4.5% with atypical antipsychotics; the patients with bipolar depression were treated with mood stabilizers and ECT plus mood stabilizers at the same rate of 4.5%; 18.1% of the patients with mania were treated with ECT plus haloperidol; and of the unipolar depressed patients 13.6% were treated with psychotherapy and 9.09% with ECT and haloperidol.

Conclusion: ECT was used commonly as a treatment option in our patient group. ECT treatment was added onto haloperidol treatment in severe cases. This treatment is consistent with the recommendations of the APA and with those in the literature.

Key words: Pregnancy, mental illness, treatment, ECT, antipsychotic drugs

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[PP-120] Ref. No: 278

Peripheral edema associated with mirtazapine: Presentation of a case

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In the medical literature, occurrence of edema during treatment with mirtazapine is stated as the least frequently reported side effect. A case of edema occurring during mirtazapine treatment is reported below.

Case: A 34 year-old female patient was admitted to the psychiatric ward with a diagnosis of recurrent depressive disorder. There were no specific findings in the patient's medical history other than high blood pressure and irregularly administered antihypertensive drugs. There was no use of alcohol or illicit drugs. The treatment regimen of the patient included escitalopram 5 mg daily, alprazolam 0.5 mg daily, and hydroxyzine 12.5 mg daily. Mirtazapine 15 mg daily was added to the medical treatment, as the depression and insomnia continued. The day after beginning the treatment with mirtazapine pretibial edema developed. The CBC, ALT, AST, GGT, ALP, bilirubin, albumin, urea, creatinine, Na, K, Cl, Ca, urine analysis, thyroid function tests and chest X-ray were repeated and all were within normal limits, as before. Cardiac insufficiency, cirrhosis, nephrotic syndrome, and venous insufficiency, all of which can cause edema, were ruled out by the internal medicine consult. The patient was not in the premenstrual period and not pregnant. It was also reported that such a side effect was observed during the administration of escitalopram to the patient. The edema was assessed as being due to mirtazapine. The edema decreased three days after the cessation of the mirtazapine treatment and the administration of furosemide 40 mg/day at the recommendation of internal medicine. It disappeared ten days later. Escitalopram 10 mg daily and hydroxyzine 25 mg daily were continued. The patient, whose depressive symptoms decreased and anxiety disappeared, has continued to be followed up as an outpatient after discharge. The patient's depressive symptoms did not recur and her blood pressure remained within normal limits although she did not receive any antihypertensive treatment. She had no edema at her two month follow up visit. Her CBC, electrolytes, biochemical and thyroid function tests, and urine analysis all remained within normal limits.

Discussion: In our case, the occurrence of edema simultaneously with the administration of mirtazapine, the exclusion of systemic diseases that can cause edema, the lack of continuation or recurrence of the edema even as the patient remained on escitalopram between the previous and the current depressive episodes, and finally the disappearance of the edema right after the cessation of mirtazapine treatment made us to think that the edema was caused by mirtazapine. In the medical literature, it is reported that MAOIs, escitalopram, and sertraline can cause edema. Kutscher et al. reported that peripheral edema occurred in a male patient of 60 years of age after the use of mirtazapine and disappeared right after the cessation of mirtazapine treatment (1,2,3,4). More detailed studies should be conducted to explore and understand this issue better.

Key words: Edema, mirtazapine

References:

1. Remick RA,Froeze C,Keller FD(1989)Common side effects associated with monoamine oxidase inhibitors.Prog Neuropsychopharmacol Biol Psychiatry 13:497-504.
2. Masdrakis VG,Oulis P,Kouzoupis AV,Masdrakis GV,Soldatos CR(2009)Bilateral ankle oedema in a patient taking escitalopram.World J Biol Psychiatry 10:939-41.
3. Dadic-Hero E,Ružic K,Grahovac T,Graovac M,Palijan TZ,Sepic-Grahovac D(2011) Allergic reactions--outcome of sertraline and escitalopram treatments.Psychiatr Danub. Mar;23(1):120-2.
4. Kutscher EC,Lund BC,Hartman BA(2001)Peripheral edema associated with mirtazapine. Ann Pharmacother.35(11):1494-5.

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[PP-121] Ref. No: 280

Abuse of tianeptine: A case report

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Tianeptine is an atypical antidepressant, which modestly enhances the mezolimbic release of dopamine. Tianeptine is an antidepressant that is accepted as not being abused by patients. However, there have been some case reports regarding abuse and/or addiction to it. The abuse of tianeptine is rare and so far has only been reported in patients with pre-existing multi substance abuse disorders. A total of 141 cases of abuse were reported between 1989 and 2004. The patients usually sought and experienced a psychostimulant effect. The stimulant effect of tianeptine has been specifically emphasized in some case reports of tianeptine abuse in the literature.
In this poster, a twenty year-old female patient, who received tianeptine treatment for depression and developed tianeptine dependence is presented. In our case, the patient was taking sixty pills daily. Although she took sixty pills, her biological tolerance was excellent and hepatic and hematological parameters were not affected, similar to the findings of other reports in the literature.
This case emphasizes that while prescribing tianeptine treatment clinicians should be careful using it in patients with substance abuse problems, as reported by other case reports in the literature.
Key words: Tianeptine abuse, tianeptine dependence

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GWAS with AHP based SNP prioritization approach to identify SNP biomarkers for Alzheimer's disease

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Genome wide association studies (GWAS) is defined as search for biological variance associated with certain phenotypes and diseases among individuals in a population depending on statistical analysis. Combined p-value approach has been introduced recently and is defined as the second-wave GWAS. It helps mapping of significant SNPs to genes and pathways to evaluate SNP-gene-disease associations. Identification of enriched genes and pathways significantly associated with diseases can be performed via this approach.
The major bottleneck of current standard GWAS approaches is the prioritization of statistically significant results. Our group has recently developed a novel Analytical Hierarchical Process (AHP) based on a structured SNP prioritization algorithm. SNPs are scored according to their biological relevance in terms of their genomic location and functional consequence, evolutionary conservation, and gene-disease association. The recently developed METU-SNP application integrates GWAS, combined p-value while utilizing AHP based SNP prioritization algorithms. Combined p-value and AHP prioritization approach for GWAS of Alzheimer's Disease (AD) has been utilized for the SNP-disease association of AD for the first the time in this study with METU-SNP software.
The results from the analysis of two different sets of AD genotyping data with the newly proposed AHP based prioritization yield promising results for both datasets. For the ADNI data, all the top 100 SNPs according to AHP scoring map to OMIM associated genes and 18 of them map to AD linked genes. For the GenADA data, all the top 100 SNPs according to AHP scoring map to OMIM associated genes and 37 of them map to AD linked genes. Glycolysis and gluconeogenesis, leukocyte migration, axon guidance, actin filament polymerization, cell adhesion, DNA fragmentation during apoptosis, fatty acid metabolism, and negative regulation of cell proliferation are common pathways residing at top 100 pathways according to combined p-value for pathways that are observed in GWAS results of both data sets. GWAS of both data with METU-SNP confirms the literature for AD associated genes; A2M, ABCA1, ACE, APOA1, APP, CHRNA7, IL1A, LDLR, LPL, MPO, PTGS2, SORL1. rs3781835 at SORL1, rs4343, and rs4351 at ACE1 are SNPs with high AHP scores are also listed to be AD associated at PharmGKB database. Moreover, CT and TT genotype of rs6313 at HTR2A gene indicates resistance to the treatment with antipsychotic drugs for AD patients presenting delusional symptoms. As presented here METU-SNP is a powerful tool with a novel AHP based prioritization algorithm implemented, which can lead to discovery of new associations at SNP, gene, and pathway level. In near

future, we expect that these new associations described through GWAS here and in other studies will lead to development of personalized medicine approaches with application in pharmacogenomics and psychopharmacology.
Key words: AHP, Alzheimer's disease, biomarker, GWAS, personalized medicine, pharmacogenomics, SNP prioritization

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A case report of a relapse in a major depression patient with valsartan/hydrochlorothiazide

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It is known that some drugs can cause depression. In particular, there is evidence that barbiturates, vigabatrine, topiramate, flunarizine, corticosteroids, mefloquine, efavirenz, and interferon alpha have been shown to cause depression (1). Angiotensin II is a strong vasopressor with various physiological effects especially regulating blood pressure. It regulates water retention and aldosterone secretion. Angiotensin II has two known receptors, AT1 and AT2. Valsartan is a non-selective angiotensin AT selective blocker, which prevents angiotensin binding to AT2 receptors and controls hypertension in this way (2). It has been shown that angiotensin converting enzyme polymorphism is related to relapse in major depression patients after partial sleep deprivation and this was related to its effect on the dopaminergic system (3). This finding shows that drugs targeting the angiotensin system may effect depression. Here we present a case with recurrent depression who was in remission and relapsed after she was given an antihypertensive medication containing valsartan and hydrochlorothiazide. She was a 56 year old single woman, living alone. She had a depressive episode in 1983 for the first time and had other episodes in 1997, 2001, and the last one in 2003. After having used venlafaxine and paroxetine, she was given citalopram in 2003 at 40 mg/day, which she has been using until now. She did not have any depressive attacks after 2003. She was given an antihypertensive containing valsartan and hydrochlorothiazide 3 months before she presented to our clinic. After taking the medication she had reluctance, despondency, intense feelings of guilt with statements like "she will not be even accepted to hell." There were no stressors that the patient or her relatives defined. The patient was admitted to our clinic after her symptoms increased the month prior to her admission. Since there were published articles on depression triggered by valsartan and similar antihypertensives and since the patient's symptoms started after taking the medication, we continued on her drug regimen with citalopram 40 mg/day and changed her antihypertensive medication to a calcium channel blocker, amlodipine. After 2 weeks her symptoms started to decrease. We concluded that her depression was triggered by valsartan. This case is important for showing that medications affecting the angiotensin system can trigger depression and there is a need to study the role of the angiotensin system in the etiology of depression.
Key words: Valsartan, antihypertensives, depression, relapse

References:

1. Celano CM, Freudenreich O, Fernandez-Robles C, Stern TA, Caro MA, Huffman JC. Depressogenic effects of medications: a review.Dialogues Clin Neurosci. 2011;13(1):109-25.
2. Black HR, Bailey J, Zappe D, Samuel R.Valsartan: more than a decade of experience. Drugs. 2009;69(17):2393-414.

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[PP-124] Ref. No: 158

Monosymptomatic hypochondriacal psychosis: A case report

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Introduction: The somatic type of delusional disorder is also recognized as monosymptomatic hypochondriacal psychosis. According to the DSM-IV, the disorder is characterized by the presence of a somatic delusion in which the person has a false belief of having some physical defect or a general medical condition (1). The most substantial characteristic of the aforementioned disorder is the demand of the patient attributing the symptoms to a serious physical illness, and seeking medical advice continuously in an effort to find transient

relief by being informed of the absence of a disease (2).

Case Presentation: A 26- year old, female patient was admitted to an outpatient psychiatric clinic with complaints of having a possible ocular disease, which may cause blindness. Her symptoms included her irises deviating involuntarily, her eyes moving incoherently, and having a feeling in her eyes as if they are being drawn away. A previous psychiatric admission of the patient was reported to be 3 years ago with the complaints of dysmorphism and tremor in her hands and having a serious disorder relevant to her hands for which she was seen by several specialists although she wasn't convinced by their answers. Although, thereafter she was hospitalized and was treated with several mood stabilizers and antipsychotic medications for the following three years in outpatient clinics, a full remission could not be achieved.

She was hospitalized again. Her physical and neurological examination didn't reveal any biological anomalies. It was noticed that she was touching her eyes constantly and her speech was focused on her bodily sensations so that she couldn't maintain her attention on any other topic. In the contents of her thoughts, she had somatic delusions as defined above. She was treated with pimozide, started with 2mg and increased up to a dose of 6 mg/day gradually. Her condition was observed to improve with a decrease in intensity of her symptoms, increased interest, improved self-care, decrease in the amount of her speech and becoming more functional.

Discussion: Because there was no increase in psychomotor activity and the content of speech was solely about the sensations in her eyes, we did not diagnose her with an affective disorder. We arrived at the diagnosis of monosymptomatic hypochondriacal psychosis after evaluating the cues such as the worry about having an eye disease, not being persuaded with the medical examinations and diagnosis, lack of any other psychotic symptoms, delusions being only about bodily sensations, several admissions to non-psychiatric physicians, and her resistance to treatment with multiple drugs. In the literature there are cases reporting surgery, which was not required, such as an operation to treat a patient stating that he had a lumbar nerve root compression (3). In the present case the patient presented to internal medicine and ophthalmology clinics at the beginning insisting that she needed an eye operation. In a study on 23 patients it has been reported that these cases have responded well to pimozide (4).

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Amisulpride in the treatment of treatment resistant tic disorder: A case report

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Introduction: Tics are sudden, recurrent, involuntary motor movements or vocalizations caused by involuntary contractions of motor or vocal muscles. Typically these disorders are characterized by early childhood onset and are more common in the male population. Genetic, neurobiological, neurochemical and environmental factors play a role in the pathogenesis, and malfunctioning of the basal ganglia is thought to be responsible for the disease. The presence of abnormalities in the EEG of some patients, worsening of the tics with administration of dopamine agonists, and improvement of tics with antidopaminergic agents are some of the known biological evidence. Amisulpride, with a pure antidopaminergic activity, and thus being used effectively in the treatment of Tourette's syndrome, makes it a candidate to treat other tic disorders, as well. In this report, an adult patient diagnosed with "Tic Disorder Not Otherwise Specified," who was previously treated with several antidepressant and antipsychotic drugs, is cured with amisulpride.

Case presentation: A 21-year-old single male patient was admitted to the hospital complaining of impairment in interpersonal relations, difficulties in social adaptation due to the involuntary repetition of certain movements. His complaints had started at the age of nine after his uncles were killed. Though the patient was tried on different treatment regimens, but he had no benefits. Because of his tics, he hardly finished his primary school education and was not able to work for a long time.

In history there were no perinatal or neonatal complications and he was born by spontaneous vaginal birth. As the sixth of eleven children, his developmental history was normal. There was no family history of any mental illness, epilepsy, alcoholism, or movement disorder.

On his admission to the unit, he was given amisulpride 200mg/day and the dosage was increased to 400mg/day in three days. He had a score of 15 in motor tics on admission and he had a score of 3 for motor score (80% decrease) at the third week of the treatment. No side effects were observed and he was discharged at the end of the third week. All of the signs were in remission on the follow up after two months.

Discussion: Contrary to the antipsychotics effecting both D1 and D2 receptors in the nigrostriatal pathway, antipsychotics of the benzamide group, which work as selective D2 receptor antagonists, are effective in the treatment of tic disorders. As the most preferred drug in this group, amisulpride causes less extrapyramidal side effects by selectively acting on the limbic regions rather than striatal regions. In the literature, there are case reports of amisulpride's effective use in tic disorders.

Clinicians should keep in mind that, with less side effect risk compared to conventional antipsychotics and the benefits of its mechanism

of action, amisulpride might be the drug of choice in tic disorders. On the other hand, larger controlled clinical trials should be planned on this issue.

Key words: Tic disorders, echopraxia, amisulpride, side effect

References:

1. Turan M, Çilli AS. Tik bozuklukları. Genel Tıp Derg. 1999;9(3):117-21
2. Fountoulakis KN, Lacovides A, Kaprinis GS. Successful treatment of Tourette's disorder with amisulpride, Ann Pharmacother. 2004; 3: 901.
3. Leysen JE, Janssen PMF, Heylen L, Gommeren W, Van Gompel P, Lesage As.Receptor interactions of new antipsychotics: relation to pharmacodynamic and clinical effects. Int J Psychiatry Clin Pract; 1998; 2(Suppl.1): 3-17.
4. Ates MA, Algül A, Semiz UB, Güneş C, Çetin M. Tedaviye dirençli Gilles de la Tourette sendromunda amisülpirid kullanımı: Bir olgu sunumu. Yeni Sempozyum Dergisi. 2009; 47:1: 16-18.

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Evaluation of patients with obstructive sleep apnea syndrome referred to the sleep disorders unit of a university hospital

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Introduction: Obstructive sleep apnea syndrome (OSAS) is characterized by repetitive episodes of apnea and hypopnea, and decrease in oxygen saturation (1). The relationship of OSAS and other medical conditions has been explored in the research literature while the relationship between OSAS and mental health has not been sufficiently investigated yet. The aim of this study was to determine the distribution of mental disorders and the type of distribution of mental disorders within clinical features of OSAS from the point of view of psychiatry.

Method: The patients, who were referred to the sleep disorders unit of Karadeniz Technical University, Faculty of Medicine Hospital for 1 year were considered the population for this study. A total of 102 patients, with a diagnosis of OSAS according to polysomnography and patients with no exclusion criteria composed the sample of the study. The patients were classified according to the ICSD-2 (The International Classification of Sleep Disorders) with polysomnography. Sociodemographical and clinical features of the patients were recorded. The Montgomery Asberg Depression Rating Scale, the Beck Depression Inventory and the Epworth Sleepiness Scale were administered. Psychiatric diagnoses were made by interviews based on the DSM-IV Axis I Disorders (SCID-I).

Results: According to the ICDSD-2, 19.6% (n=20) of the patients had a mild, 29.4% (n=30) had a moderate and 51,0% (n=52) had a severe form of OSAS. The distribution of sex, marital status, and occupation are shown in Table I. The means of weight and height of the whole sample were 91.15±16.78kg and 168.23±8.76cm, respectively. Fifty-seven point nine percent of the patients (n=59) had had a psychiatric referral previously, 42.2% of them (n=43) did not. According to the body mass index (BMI), 5.9% of patients (n=6) were within normal limits, 30.4% were (n=31) overweight, 54.9% were obese (n=59) and 8.8% were morbidly obese (n=9). The Epworth Sleepiness Scale total score was significantly higher in severe OSAS patients (p=0.002). The relationship of mild and moderate OSAS with BMI was significant (p=0.010). The median age of severe OSAS patients was significantly higher than mild OSAS patients (p=0.0529).

Thirty-one point four percent (n=32) of patients had 1 diagnosis according to the SCID-I, 22.5% (n=23) had more than one diagnosis, and 46.1% (n=47) did not have any diagnosis. The total scores of the BDI and the MADRS were 5.49±9.05 and 5.82±9.40, respectively.

Discussion: There are many risk factors for OSAS. Male predominance is present for adult OSAS patients. The number of male patients was higher than female patients in this study. One of the most important risk factor is obesity (2). Most of the patients were obese or morbidly obese in our group. The detected depression rate was correlated with many studies which reported higher depression rates in OSAS (2-5). In this study the rate of anxiety disorders was higher than in the healthy population while being similar or lower than the rate estimated in previous studies with OSAS patients.

Conclusion: Mental disorders associated with medical diseases are important clinical syndromes effecting morbidity and mortality. Recognizing the symptoms and signs of OSAS is important. Regarding this issue, further studies with larger samples comparing different subgroups are needed.

Key words: Obstructive sleep apnea, mental diseases

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Clozapine use in idiopathic tardive dystonia and paranoid schizophrenia comorbidity: A case report

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Objective: To present brief idea about a suitable and safe antipsychotic usage in patient with schizophrenia and tardive dystonia.
Method: Results will be discussed.
Results:
Case: A 42-year-old woman with diagnose of first episode and drug naïve schizophrenia presented with involuntary movements in her orobuccal region, including tongue and lips. At first administration, routine biochemical and hematological assessments were normal, and patient had positive and negative features of schizophrenia. According to the information received her relatives, although she has not taken any antipsychotic medication, her involuntary movements has been risen 18 month earlier her antipsychotic treatment. These movements were consulted with neurology clinic. Her brain MRI, EEG, and further assessments including detailed neurological examination, jaw MRI was normal, and specialist of neurology suggested that the clozapine usage may be helpful because of the possible idiopathic tardive dystonia. Clozapine medication was started with gradually, although there was not enough proof about prior antipsychotic usage and anatomical or functional deficit. During her hospitalization, all of the involuntary movements were recovered with 200 mg/day clozapine, and more than 35% percent decrease was observed at her positive (SAPS) and negative (SANS) scale assessments with 600 mg /day clozapine. In this period, there was no side effect except moderate sialorrhea. Etiology of the idiopathic tardive dystonia is still remaining unclear, and data for treatments is receiving from the case reports. There is some evidence about efficacy of clozapine treatment (1,2). In addition, there is a consensus about that clozapine can cause extrapyramidal side effects rarely and effective treatment option for schizophrenia as well (3). On the other hand, tendency of the general psychiatry practice would prefer to this molecule in the resistant schizophrenia which is describe as show no remission despite of two different kinds of antipsychotic usage for minimum six weeks (4). In this case, clozapine usage in the first line seems to be necessary because of the idiopathic tardive dystonia. It may be clarified with further studies whether this case was remitted incidentally or this remission was related with antagonistic effects of clozapine on the receptors of D1.
Conclusion: Clozapine may be a first line treatment option for the drug naïve patients with first episode schizophrenia and tardive dystonia. However, we need further studies performed with wide case series to achieve this kind of opinion.
Key words: Tardive dystonia, neurological, schizophrenia, clozapine, safety, efficacy

References:

1. Kwan Y, Sim K. Resolution of tardive dystonia in a patient with bipolar disorder treated with clozapine: a case report. Prog Neuropsychopharmacol Biol Psychiatry 2010; 34(1):238-239.
2. Aukst-Margetic B, Margetic B. Treatment of generalized tardive dystonia with clozapine. Psychiatr Danub 2008; 20(3):329-331.
3. Asenjo Lobos C, Komossa K, Rummel-Kluge C, Hunger H, Schmid F, Schwarz S, et al. Clozapine versus other atypical antipsychotics for schizophrenia. Cochrane Database Syst Rev 2010; (11):CD006633.
4. Kane J, Honigfeld G, Singer J, Meltzer H. Clozapine for the treatment-resistant schizophrenic. A double-blind comparison with chlorpromazine. Arch Gen Psychiatry 1988; 45(9):789-796.

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[PP-128] Ref. No: 306

The clinical use of Buprenorphine-Naloxone in the opioid-dependent patient with Hepatitis C

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Introduction: Guidelines for the treatment of opioid dependence which developed by organizations such as American Society of Interventional Pain Physicians (ASIPP) and the American Psychiatric Association (APA) recommend extensive treatment with

pharmacological treatments such as methadone, buprenorphine, buprenorfine-naloxone as well as psychosocial therapy. Buprenorphine-Naloxone therapy is being used effectively as an alternative treatment to entering patients into a methadone outpatient clinics (1). The clinical relevant effect of buprenorphine depends on m-opioid receptor agonism (2).

Case: 16-years-old male patient with opioid dependence diagnosed according to DSM-IV criteria entered CEMATEM (Child and Adolescent Alchol and Substance Treatment Centre) clinic for out-patients in Bakirkoy Research and Training Hospital for Psychiatry and Neurology and a week later the patient has been hospitalized. Liver enzyme levels were normal and opiat value was found as positive in sub-threshold in routine controls and after 6- 8 hours Buprenorfin-Naloksan combination (Suboxone) treatment was received the patient experienced withdrawal symptoms.In patient's routine blood tests, hepatitis C virus (HCV) was determined and the patient developed significiantly elevated liver enzyme levels during buprenorphine-naloxone treatment.

Conclusions: Although Buprenorphine has been used clinically in the early 1970s, it's metobolism has not been fully unterstood already (3). Buprenorphine was mainly metobolized by N-dealkylation and glucuronidation of buprenorphine and norbuprenorphine by CYTP450 isoforms in liver (4). For non-hepatitis subjects, buprenorphine treatment showed no evidence of altered liver enzyme levels.

In contrast, AST and ALT levels increased significantly with buprenorphine treatment among patients with a history of hepatitis (5).

Liver enzym values significiantly elevated in this case with hepatitis C received Buprenorphine-Naloxone combination treatment.

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The use of z hypnotics in the management of insomnia in forensic psychiatric units in Oxford, England

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Objectives: Insomnia has an estimated prevalence of 30% in general population and its prevalence is higher among psychiatric patients. In 1987 a survey showed around half of psychiatric patients received a hypnotic medication. Also people with mental health problems have an increased risk of developing dependence on hypnotics. "Z-drugs" are benzodiazepine like medications and are used as primary pharmacological treatment for insomnia. They include zolpidem, zaleplon, and zopiclone. Zopiclone is not available in the US, although its active stereoisomer, eszopiclone is available. NICE guidelines recommend trying non-pharmacological interventions such as sleep hygiene prior to considering "z drugs." The symptoms, findings of evaluation, and the reasoning behind prescribing "z drugs" should be documented in medical and nursing notes. The maximum duration should not be longer than 2 weeks when "z drugs" were used.

The aims of this study included: To review if 'z-drugs' were prescribed according to the NICE guidelines, whether "insomnia" was documented in patient charts or not, if other measures were tried before prescribing a "z drug," and if the reason for switch was documented, in case of switching from one "z drug" to another.

Methods: We reviewed all the progress notes and medication charts for a 6-month duration between January 1-June 30, 2010 for all of the inpatients (n= 74) in the 6 forensic wards at the Littlemore Hospital. We identified the patients, who were prescribed "z drugs" for insomnia, and reviewed their records.

Results: We found out that only 3 patients were prescribed "z drugs," which was zopiclone 7.5mg/day for all of three cases. All orders were for as needed basis use. Insomnia was recorded in medication charts, but not in the notes section. Non-pharmacological measures were tried in only one of the patients and documentation was found in one case, too. The maximum duration was not documented and there was no revision in original orders.

Conclusions: Based on our data the "z drugs" are rarely used in forensic units of Littlemore Hospital. The only prescribed one was zopiclone and it was used only for a couple of days. The documentation regarding use of those medications was rare and no case of switch to another "z drug" was found. Checking for the response to the treatment and conducting the study in general wards beside forensic units would have improved this study and provided more patients, who were prescribed those medications.

The majority of forensic patients are on high doses of antipsychotics or rapid tranquilizers, which might help to cope with insomnia. We found that other than documentation the standards were followed by the Trust. As forensic patients were supervised at all times on-call doctors should be able to prescribe Z hypnotics, when needed. The use of sleep hygiene in treatment of insomnia should be encouraged for all patients.

Key words: Z hypnotics, forensic, psychiatric, z drugs, Oxford

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Pathological gambling: A case report

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Pathological gambling(PG), is a disorder which is growing everyday with the increasing prevalence of opportunities for play, usually properly diagnosed, treatment can be difficult and increasingly restricting the individual's living area. PG, for the first time in 1980, by The Union of American psychiatry has been recognized as a disorder and the DSM-3 was unable to resist the urge to gamble as a continuous and progressive definition of a "Impulse Control Disorders Not Elsewhere Classified" has been included under the heading. Physiological symptoms of DSM-3-R were included in the PG, "the excitement is to be obtained to provide the desired amount of bets or the need to increase the frequency of hearing," such as tolerance and "gambling oynayamayınca hearing restlessness or irritability, such as" withdrawal symptoms participated in the diagnostic criteria. We present a case of PG, 28 year old male patient who is treated with quetiapin and cognitive behavioral treatment (CBT). With CBT, we did daily psychotherapeutic interview and patient had discovered his cognitive distortion. Also we saw that SSRIs, Naltrexone, Lithium and Carbamazepine could be used in PG treatment. Patient was externed after 11 days hospitalizing. At the controls we obtained that patient had not gamble again. As a result this was the effect of Cognitive Behavioral Treatment.
Key words: Pathological gambling, cognitive behavioral treatment, cognitive distortion

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