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MEDROXYPROGESTERONE ACETATE-INDUCED MANIC EPISODE IN A PATIENT WITH BIPOLAR AFFECTIVE DISORDER-I

BİR BİPOLAR DUYGUDURUM BOZUKLUĞU HASTASINDA MEDROKSİPROGESTERON ASETAT İLE İNDÜKLENMİŞ MANİK EPİZOD

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Dear Editor,

Medroxyprogesterone acetate (MPA) is a methyl acetyloxy derivative of progesterone. It shows direct and indirect anti-estrogenic effects by inhibiting gonadotropin secretion. In higher doses, it acts as androgen and glucocorticoid reseptor agonist (Kayaalp, 2000; Sitruk, 2002). Side effects include galactorrhea, menstrual changes, weight instability, jaundice and psychiatric conditions such as depression, insomnia, fatigue, and irritability (Sitruk, 2002). In bipolar affective disorder reinforcement treatment, it can be used as a mood stabilizer, but it can increase depressive symptoms (Kulkarni et al., 2006). So in this article, we aimed to emphasize that although MPA can cause anti-manic and depressive effects, it may also induce manic symptoms in some cases. although MPA can cause effects such as anti-manic symptoms and increase depresive symptoms, it may also induce manic symptoms in some cases

A 34-year old female patient was prescribed MPA for irregular menstrual cycles. She was single, high school graduated, and unemployed. After using MPA 5 mg twice a day for only 2 days,After using for only 2 days, 5 mg twice a day, she admitted to psychiatry emergency department with irritability, insomnia, increase in speech. According to the history taken from patient and relatives, she was diagnosed with bipolar affective disorder-I 15 years ago she has been diagnosed with bipolar affective disorder-I 15 years ago and she was prescribed valproate 2000 mg/day, paliperidone 6 mg/day, quetiapine 50 mg/day for the last year. Her blood valproic acid level was 69.8 mg/L. She used her medications regularly, yet she passed four manic episodes without hospitalization. She has no family history of any psychiatric or organic disorder. In her mental examination, mood was elevated, affect was irritable, thinking processes was accelerated, association of idea was accelerated, psychomotor activity was increased, sleep and appetite was decreased.starvation were decreased. Her speech rate and amount were increased, she had grandiose delusions she had delusions such as grandiosity but no hallucinations. Young Mania Rating Rate Scale (YMRS) score was 27. Her complete blood count, biochemistry tests, thyroid hormone levels, full urinalysis, urine substance metabolite levels (cannabis, canabis, heroin,etc.) were all normal.With the initial diagnose of manic episode due to drug usage, MPA was stopped and she was given haloperidol 10 mg/day and biperiden 5 mg/day IM for stabilization. Lorazepam 3 mg/ day was added to her present treatment and one week after her manic symptoms were alleviated she was discharged with lorazepam 2mg/day, valproate 2000 mg/ day, paliperidone 6mg/day, quetiapine 50 mg/day. She was referred to gynecology and also psychiatry outpatient clinics for follow ups. In her first follow-up visit one week after discharge; it was seen that her mood elevation, psychomotor activity and speech rate were reduced and her YMRS score was 11. The lorazepam therapy dose was reduced and she was invited for the second follow up. With initial diagnose of manic episode due to drug usage, she was given haloperidol 10 mg/day, biperiden 5 mg/ day IM according to DSM-IV TR diagnostic criteria for bipolar affective disorder-I. After she was stabilized by intramuscular injectionlorazepam 3 mg/ day was added for maintenance. She was discharged with lorazepam 2mg/day, valproate 2000 mg/day, paliperidone 6mg/ day, quetiapine 50 mg/day one week later. She was recommended to go to out-patient clinic of gynecology and obstetrics again, after her mood was euthymic, as MPA was stopped. One week later, in her follow-up visit, her mood elevation, psychomotor activity and speech rate were reduced. YMRS score was 11. The lorazepam therapy was reduced and for redetermination she was invited for control after ten days.

One of the main reasons for termination of hormone replacement treatments including MPA during perimenopausal and early post-menopausal periods is its effects on mood (Li et al., 2000). In a study where

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estrogen receptor modulators (tamoxifen) and progestins (medroxyprogesterone acetate) were added to mood regulators of 51 manic female patients, it was seen that manic symptoms responded faster to treatment and more patients responded to the drug in MPA group compared to tamoxifen group therefore MPA has been considered as a new additional treatment in manic patients (Kulkarnietal., 2006).

On the other hand, MPA treatment was also implicated to worsen depressive symptoms in women (Nupur, 2001). In a study of 80 female patients who received MPA treatment, long-term treatment was found to increase depressive symptoms whereas short term treatment did not (Westhoff, 1995). In another study; psychiatric symptoms such as anger and hostility feelings, and physiologic signs such as eating and sleep disorders was increased in MPA using group at the 6th month compared to baseline (Kıyak, 2004). In a follow-up study, depression level was found significantly higher in patients who were receiving MPA (Civic et al.,2000). On the contrary, in a study where depressive symptoms were evaluated before and after MPA use in female patients with or without depression, MPA was considered safe in these patient groups (Rogines Velo et al., 2012). So, it has been suggested that MPA was not primarily related to depression and may increase depressive symptoms in patients with mood problems. It is suggested to be careful when using these drugs in patients with a known history of mood disorders (Westhoff, 1998).

Based on the above-mentioned considerations, studies indicated that MPA may be used in treatment of manic disorder, it may increase or may not affect depressive symptoms. But as we mentioned here, we observed symptoms of manic disorder following MPA administration in our bipolar patient who was on remission. To our knowledge, this is the first case report of MPA-induced manic episode in a patient with bipolar affective disorder. It should be kept in mind that MPA containing hormone preparations may lead to manic symptoms besides affecting depressive symptoms in patient groups with or without mood disorders.

One of the main reasons for termination of hormone replacement treatment during perimenopausal and early post-menopausal periods is its effects on mood (Lİ et al., 2000). These treatments include MPA. In a previous study, estrogen receptor modulators (tamoxifen) and progestins (medroxyprogesterone acetate) added to mood regulators were compared in 51 manic female patients (Kulkarni et al.,2006). Manic symptoms responded faster and larger in MPA group when compared to tamoxifen group. MPA has been considered as a new additional treatment in manic patients (Kulkarni et al.,2006). In contrast, we observed symptoms of manic disorder following MPA administration in our patient with bipolar affective disorder. She was on remission. Besides, MPA treatment worsened depressive symptoms in women (Nupur, 2001). In a study of 80 female patients who received MPA treatment, long-term treatment affected depressive symptoms whereas short term treatment was ineffective (Westhoff, 1995). Depressive symptoms were evaluated before and after MPA use in female patients with or without depression, and MPA was considered safe in those patient groups (Rogines Velo et al., 2012). Similarly, it has been suggested that MPA was not primarily related to depression and may increase depressive symptoms in patients with mood problems. However, there are other opinions suggesting to be careful when using these drugs in patients with a known history of mood disorders (Westhoff, 1998). Conversely, In MPA using group at the 6th month compared to baseline (0.month), psychiatric symptoms such as anger and hostility feelings, and physiologic signs such as eating and sleep disorders increased (Kıyak, 2004). In a follow-up study of 6 months and 3 years, depression level was found significantly higher in patients who were receiving MPA (Civic et al.,2000). Based on the above-mentioned considerations, studies indicated that MPA may be used in treatment of manic disorder, it may increase or may not affect depressive symptoms. To our knowledge, this is the first case report of MPA-induced manic episode in a patient with bipolar affective disorder. It should be kept in mind that MPA containing hormone preparations may lead to manic symptoms besides affecting depressive symptoms in patient groups with or without mood disorders.

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