

115.07 ng/dl. There was a significant increase of serum prolactin level after two weeks ($p < 0.01$). The mean initial serum prolactin level in the risperidone group was 49.56 ng/dl and the mean level measured in the second week of the treatment of the risperidone group was 115.05 ng/dl. The mean initial serum prolactin level in the paliperidone group was 34.91 ng/dl and the mean level measured in the second week of the treatment of the paliperidone group was 115.08 ng/dl. There was no significant difference between the risperidone and the paliperidone group in serum prolactin levels ($p > 0.05$).

Conclusion: This study suggests that paliperidone has no advantage over risperidone in serum prolactin levels. The results of the study also remind that patients who are under treatment with antipsychotics should be monitored regularly in terms of hyperprolactinemia and its associated symptoms. Further studies with larger sample size and over a longer time period are needed to highlight the effects of antipsychotics on serum prolactin levels.

Keywords: prolactin, risperidone, paliperidone

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[Abstract:0630] *Pharmacotherapies*

Lorazepam-induced delirium

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Objective: Benzodiazepines are sedative hypnotic medications which are widely used in the treatment of anxiety disorders and sleeping disorders. These medications have become more widely used in our daily practice due to the significance of adding clonazepam, lorazepam, and alprazolam to antipsychotics, mood stabilizers as adjuvant medications in the treatment of acute manic episodes apart from anxiety and sleeping disorders. The side effects, which might occur during their use in addition to their misuse and addiction potentials, can arrive at a level to create problems during the application of the treatment. Anterograde amnesia might sometimes be a desired side effect in the acute use of benzodiazepines. The increase in anger and hostility, behavioral side effects such as aggressive and offensive behaviors are also known to occur with the use of benzodiazepines. There are cases where musical hallucinations, sleepwalking, and delirium have been reported among the less frequently seen side effects. In a study done with intensive care patients, it was concluded that lorazepam-based delirium was seen. There are cases reported with delirium as a result of intravenous lorazepam. As we also experienced delirium presentations accompanied by altered consciousness, confused look, disorientation, live visual hallucinations in some of our patients with lorazepam in their treatment at our clinic, we retrospectively examined our patients with lorazepam in the clinical treatment.

Methods: This study included 404 female patients who received inpatient treatment at Bakirkoy Mental Health Training and Researching Hospital 15th Psychiatry Clinic between August 2013 and July 2014. The file details of the patients were scanned retrospectively.

Results: Lorazepam was identified in the treatment of 287 patients among 404 female patients who had received inpatient treatment at the clinic. Delirium clinic was observed in 9 of 287 patients (3.1%) who used lorazepam. Five of these patients were diagnosed with bipolar disorder, two of them with schizoaffective disorder, one of them with delusional disorder and one of them with substance addiction. The age average of the patients who developed delirium was not significantly different from the age average of the other patients. There were no general medical condition diagnoses or laboratory findings to explain the delirium that accompanied their psychiatric diagnose. 278 patients who did not develop delirium had a daily average lorazepam dosage of 3.3 ± 2.1 mg/g. The patients who developed delirium had a daily average lorazepam dosage of 6.1 ± 1.7 mg/g. This was lower than the maximum recommended daily dosage of lorazepam which is 10mg/g. As there were no reasons to explain the clinical presentation other than lorazepam, lorazepam treatments were discontinued in our patients. It was determined that the delirium presentation regressed and improved within hours during fluid and supportive treatment.

Conclusion: Benzodiazepines have high affinity to GABA receptors in the central nervous system. This GABA mimetic effect might change the levels of several neurotransmitters, which are supposed to be deliriogenic. Cases reported were usually patients in the postoperative period in intensive care units or cases that developed delirium following the application of intravenous lorazepam. There were no delirium cases reported under lorazepam treatment in psychiatry clinics in the literature. Due to the wide use of lorazepam together with antipsychotic mood stabilizers in the treatment of mood disorders, we wanted to draw attention to the necessity to consider delirium among the side effects of lorazepam.

Keywords: lorazepam, delirium, side effect

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