

GYNECOMASTIA IN CLINICAL APPLICATION OF OLANZAPINE - THE CASE REPORT

M. Šakić, S. Radeljak, E. Pereza Radovčić, T. Žarković Palijan & M. Kovač

*Department of Forensic Psychiatry, Neuropsychiatric Hospital. "Dr. Ivan Barbot", Popovača, Croatia
e-mail: tija.zarkovic-palijan@sk.t-com.hr*

Previous clinical studies have shown that antipsychotic drugs have impact on the pituitary, adrenocortical, thyroid and gonadal activity. Olanzapine is an atypical antipsychotic in third generation of antipsychotic drug, and belongs to the group serotonergic and dopaminergic antagonists (SDA). Besides antagonistic activities on 5-HT₂ and D₂ receptors a third generation of antipsychotic drugs exerts its activity on other dopaminergic (D) and serotonergic (5-HT) receptors, as well as on the histaminic, adrenergic, muscarinic and cholinergic receptors. Therefore, with clinical application of SDA's we could find different range of clinically significant side effects.

The case report in our work presents a patient at the age of 32 years, treated at the Department of Forensic Psychiatry and diagnosed with paranoid schizophrenia after detailed psychiatric evaluation. In the course of deterioration of the symptoms the patient was extremely aggressive and unpredictable in social context, especially in relation to other patients. Applied pharmacotherapy was modified on several occasions and clinical application of drugs varied from conventional antipsychotics to atypical one. Adverse reactions to fluphenazine and risperidone included extrapyramidal side effects. Because of the above side effects the patient was placed on combination therapy with olanzapine in the daily dose of 10 mg, diazepam in daily dose of 30 mg and chlorpromazine as needed (maximum dosage of 100 mg daily). The range of psychotic and paranoid symptoms were reduced gradually particularly those of uncontrolled outflow fury and anger. After 18 months of good therapeutic response and absence of antipsychotic side effects, the patient developed gynecomasty in absence of galactorrhea. The blood samples showed higher plasma values of prolactine, cholesterol and triglycerides. We have gradually decreased the daily dose of olanzapine with reintroduction of conventional antipsychotics namely haloperidol in dosage of 10 mg daily with biperidine and chlorpromazine. Despite the reduction of initial dose of olanzapine, the plasma values of prolactine and gynecomastia were not reduced. After further endocrinologic and radio logic tests and evaluations of the patient's endocrine status (CT, MRI, ultrasound) a dopaminergic drug, bromocriptine, was introduced in the therapy in daily dose of 5 mg. Finally, after continuous bromocriptine therapy the patient developed stable concentration of prolactine in serum despite persistence of mild gynecomastia.