

## METABOLIC EFFECTS OF LONG-ACTING INJECTABLE ANTIPSYCHOTIC USE IN PATIENTS WITH SCHIZOPHRENIA: A RETROSPECTIVE STUDY

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**BACKGROUND AND AIM:** Schizophrenia requires long-term antipsychotic treatment, which can lead to metabolic side effects like weight gain, dyslipidemia, and insulin resistance. Long-acting injectable (LAI) antipsychotics improve treatment compliance, and this study examines the prevalence of MetS in patients.

**METHODS:** This study was conducted in the Psychotic Disorders Outpatient Clinic of Selcuk University Faculty of Medicine. Patients aged 18-65 were screened between 2020-2025. Sociodemographic, clinical and body measurement data were collected from hospital medical records. Ethical approval was obtained from the Selcuk University Ethics Committee (2023-434).

**RESULTS:** A total of 113 schizophrenia patients were included in the study, 40 of the patients were female (64.6%) and 73 were male (35.4%); mean age was  $41.74 \pm 11.50$  years. The 11.5% (n= 13) of patients were treated with first-generation (FGA)-LAI: haloperidol (n=9, 8%) and zuclopenthixol (n=4, 3.5%). The remaining 88.5% (n= 100) of the sample was treated with second-generation (SGA)-LAI: paliperidone monthly (n=41, 36.3%), paliperidone 3 monthly (n=30, 26.5%), aripiprazole (n=26, 23%) and risperidone (n=3, 2.7%). 50 patients

(44.2%) met the criteria for MetS. Among the different LAI antipsychotics used, paliperidone three-monthly had the highest MetS prevalence (60.0%), followed by aripiprazole (57.7%) and haloperidol (55.6%), paliperidone monthly (26.8%). No statistically significant difference was found between the average long-acting usage times and ages of patients of those with and without MetS ( $5.10 \pm 2.5$  and  $5.53 \pm 2.97$ ,  $p < 0.05$ ;  $42.4 \pm 10.8$  and  $41.2 \pm 12.3$ ,  $p < 0.05$ ). There was no difference between genders in terms of MetS. FGA-LAI or SGA-LAI didn't differ in terms of MetS.

**CONCLUSIONS:** Studies have shown that patients with schizophrenia have a significantly higher risk of developing MetS compared to the general population. This study further emphasizes the high prevalence of MetS among schizophrenia patients treated with LAI antipsychotics. Given the well-documented complications associated with MetS, routine metabolic screening, early detection, and preventive interventions should be an integral part of schizophrenia treatment.

**Keywords:** Long-acting injectable antipsychotics, metabolic syndrome, schizophrenia