

METABOLIC SYNDROME SHOWS AN INDEPENDENT ASSOCIATION WITH COMORBID MAJOR DEPRESSIVE DISORDER IN SCHIZOPHRENIA REMISSION: A CROSS-SECTIONAL STUDY

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BACKGROUND AND AIM: Major depressive disorder (MDD) is common in schizophrenia. Metabolic syndrome (MetS) is also frequent, but its independent association with comorbid MDD is uncertain. We estimated comorbid MDD prevalence in remitted schizophrenia and tested whether MetS is independently associated with MDD. **METHODS:** This cross-sectional study evaluated 218 individuals with DSM-5 schizophrenia (July 2022–July 2023). Remission required ≥ 6 months of stability, PANSS item scores ≤ 3 for P1, P2, P3, N1, N4, N6, G5, and G9, and no psychiatric hospitalization within the past year. MDD was defined as CDSS ≥ 7 with DSM-5–based clinical confirmation in the same encounter by a psychiatrist; ambiguous cases were reviewed with a senior clinician and resolved by consensus. MetS was defined per NCEP ATP III (≥ 3): waist circumference >102 cm (men) or >88 cm (women); triglycerides ≥ 150 mg/dL; HDL <40 mg/dL (men) or <50 mg/dL (women); blood pressure $\geq 130/85$ mmHg or antihypertensive use; fasting plasma glucose ≥ 100 mg/dL or treatment for hyperglycemia. Anthropometrics and blood pressure were measured directly; fasting glucose, triglycerides, and HDL were taken from records within 6 months.

Multivariable logistic regression included univariate covariates without multicollinearity. Ethical approval: Ethics Committee of the University of Health Sciences Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital (Decision No: 2022-06/1907; 22 June 2022).

RESULTS: Comorbid MDD prevalence was 33.0%. MetS was more frequent with MDD than without (55.6% vs 30.8%, $p < 0.01$). MetS remained independently associated with MDD (adjusted OR=2.79, 95% CI 1.46–5.32, $p=0.002$), along with PANSS positive symptoms (per-point adjusted OR=1.17, 95% CI 1.09–1.26, $p < 0.001$), prior suicide attempt (adjusted OR=2.45, 95% CI 1.16–5.16, $p=0.019$), and antidepressant use (adjusted OR=2.87, 95% CI 1.46–5.67, $p=0.002$).

CONCLUSIONS: MDD is frequent in remitted schizophrenia and shows an independent association with MetS. Screening for depression and cardiometabolic risk is warranted; longitudinal studies should clarify temporality and mechanisms.

Keywords: Schizophrenia, major depressive disorder, metabolic syndrome, Calgary depression scale, cardiometabolic risk