

COMPARISON OF CAROTID MEDIA INTIMA THICKNESS AND ANKLE-BRACHIAL PRESSURE INDEX IN PATIENTS DIAGNOSED WITH SCHIZOPHRENIA OR BIPOLAR DISORDER WITH HEALTHY CONTROLS

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BACKGROUND AND AIM: Schizophrenia and bipolar disorder are serious mental illnesses that also increase the risk of cardiovascular disease (CVD). CVD is a leading cause of mortality and morbidity worldwide, with atherosclerosis as its primary factor. Carotid intima-media thickness (CMT) and ankle-brachial index (ABI) are key clinical markers for early detection of atherosclerotic changes. This study aims to assess atherosclerosis risk by comparing CMT and ABI values in schizophrenia and bipolar disorder patients with dizziness and syncope but no known CVD, to those of healthy individuals.

METHODS: This prospective, cross-sectional study was conducted at a university hospital with ethics committee approval (reference: 2023/4-7). The study included 29 schizophrenia patients, 29 bipolar disorder patients, and 32 healthy individuals aged 18–40 years. The patient group consisted of individuals followed in psychiatry and referred to neurology for dizziness and syncope. Inclusion criteria required the absence of cardiovascular and cerebrovascular disease. CMT and ABI were measured, and routine biochemical and hemogram parameters were evaluated. Statistical significance was set at $p < 0.05$.

RESULTS: Schizophrenia patients were older than healthy controls ($p = 0.014$). Their education level was lower than that of bipolar and healthy controls ($p = 0.024$), and their employment rate was significantly lower ($p < 0.001$). Schizophrenia patients had lower platelet levels ($p = 0.031$), while neutrophil-to-lymphocyte ratio (NLR) was significantly higher in schizophrenia and bipolar groups ($p = 0.017$). However, CMT, ABI, arterial flow, and blood pressure showed no significant differences among groups ($p > 0.05$).

CONCLUSIONS: No significant differences in CMT and ABI were found between schizophrenia and bipolar disorder patients and healthy controls. However, the higher NLR in schizophrenia and bipolar patients suggests inflammation's role. The study is limited by its small sample size and cross-sectional design. Future large-scale studies will better clarify the relationship between these disorders and cardiovascular risk factors.

Keywords: Bipolar disorder, schizophrenia, ankle-brachial index