

Original Paper

Extracranial and transcranial doppler sonography alterations in diabetic and non-diabetic patients with thrombotic stroke

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Abstract

Background and Objective: Diabetes is a major risk factor for stroke. Some studies have shown that difference between clinical signs and prognosis in diabetic patients with stroke compared to non-diabetic patients with stroke is due to difference in pattern of cerebral vascular involvement. This study was done to compare the findings of extracranial and transcranial doppler sonography in diabetic and nondiabetic patients with thrombotic stroke.

Materials and Methods: This case – control study was done on 70 diabetic patients and 70 non-diabetic patients with thrombotic stroke. All patients were new cases. Extracranial and transcranial doppler sonography was performed for all subjects.

Results: Basilar artery stenosis was significantly more frequent in diabetic cases in comparison with non-diabetic patients ($P < 0.05$). The prevalence of posterior circulation stenosis in diabetic patients was significantly higher than non-diabetic patients ($P < 0.05$).

Conclusion: In diabetic patients, stenosis in vertebrobasilar circulation was more frequent. Higher morbidity and mortality in diabetic patients may be due to vascular stenosis pattern.

Keywords: Stroke, Diabetes, Basilar artery, Cerebral doppler sonography

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