Dokumenttyp: journal article

Autor(en) des Beitrags: Holzer, K; Sadikovic, S; Esposito, L; Bockelbrink, A; Sander, D; Hemmer, B; Poppert, H

Titel des Beitrags: Transcranial Doppler ultrasonography predicts cardiovascular events after TIA.

Abstract: BACKGROUND: Transient ischemic attack (TIA) patients are at high vascular risk. We assessed the value of extracranial (ECD) and transcranial (TCD) Doppler and duplex ultrasonography to predict clinical outcome after TIA. METHODS: 176 consecutive TIA patients admitted to the Stroke Unit were recruited in the study. All patients received diffusion-weighted imaging, standardized ECD and TCD. At a median follow-up of 27 months, new vascular events were recorded. RESULTS: 22 (13.8%) patients experienced an ischemic stroke or TIA, 5 (3.1%) a myocardial infarction or acute coronary syndrome, and 5 (3.1%) underwent arterial revascularization. ECD revealed extracranial≥ or = 50% stenosis or occlusions in 34 (19.3%) patients, TCD showed intracranial stenosis in 15 (9.2%) and collateral flow patterns due to extracranial stenosis in 5 (3.1%) cases. Multivariate analysis identified these abnormal ECD and TCD findings as predictors of new cerebral ischemic events (ECD: hazard ratio (HR) 4.30, 95% confidence interval (CI) 1.75 to 10.57, P = 0.01; TCD: HR 4.73, 95% CI 1.86 to 12.04, P = 0.01). Abnormal TCD findings were also predictive of cardiovascular ischemic events (HR 18.51, 95% CI 3.49 to 98.24, P = 0.001). CONCLUSION: TIA patients with abnormal TCD findings are at high risk to develop further cerebral and cardiovascular ischemic events.