

**Prevalence of Atherogenic Profile and Heart Failure in Vascular Dementia**

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**Objectives:** Purpose of our study was to evaluate the incidence of atherogenic profile, heart failure (HF) and if there is any correlation between these and cognitive impairment (CI) in patients with vascular dementia (VaD).

**Method:** This was a retrospective study. We analyzed 35 patients with VaD and 25 age- and sex-matched healthy controls. NINDS-AIREN criteria and Hachinski's ischemic scale were used to identify VaD. Mini Mental State Examination was used to classify CI into mild, moderate and severe. Clinical and biochemical features were investigated by means of standardized tests. Echocardiography was done for evaluate ejection fraction (EF).

**Results:** Prevalence of atherogenic profile was increased in VaD compared with controls (72.2% vs 20%,  $p < 0.001$ ). High LDL cholesterol, triglycerides and low HDL cholesterol values were characteristic for VaD patients in the last 10 years. In present time we found low level for HDL cholesterol ( $34.1 \pm 4.6$  mg/dl vs  $44.2 \pm 5.8$  mg/dl,  $p < 0.001$ ) and triglycerides ( $102.7 \pm 7.5$  mg/dl vs  $154.2 \pm 4.5$  mg/dl,  $p < 0.01$ ) when compared with controls. 8 patients had mild CI, 2 of them had HF class II and 6 had class III NYHA, with EF in normal limits. 23 patients had moderate CI and low EF; 7 of them had HF class III and 16 had class IV NYHA. 4 patients with severe CI had very low EF and HF class IV NYHA. We found correlations between EF, triglycerides and CI. **Conclusions:** The prevalence of atherogenic profile and heart failure were significantly higher in VaD and were correlated with cognitive impairment.