



22. RISK FACTORS FOR VASCULAR DEMENTIA

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Introduction. Vascular dementia is a neurodegenerative disorder that occurs due to cerebrovascular disease and hypoperfusion. This can range from large vessel stroke to microvascular disease. The symptoms and presentation can be heterogeneous, depending on the extent of vascular lesions and the anatomical location. Lesions can be limited to a single site, multifocal, or diffusely distributed.

Aim of study. Updated information was analyzed to quantify the impact and importance of the risk factors of vascular dementia in order to demonstrate their influence in the prevention and management of the patients with vascular dementia.

Methods and materials. A synthesis analysis of international publications and specialized literature was performed using PubMed, Google Academic, Medline, ResearchGATE network, databases published during 2016-2022. With the usage of keywords dementia, vascular dementia, risk factors, stroke, hypertension.

Results. Through this study, it was highlighted that vascular dementia can be caused by small-vessel disease or by large-artery atherosclerosis with vascular lesions in strategic areas of the brain. In both cases changes in white matter are observed. Vascular factors like hypertension, stroke, diabetes, coronary artery disease, atrial fibrillation and atherosclerosis may increase the risk for vascular dementia by promoting inflammation, cerebral vascular disease, white matter lesions, and hippocampal sclerosis. It has been shown that depression, mutations in the APOE gene, use of saturated fatty acids, urban living, and lack of exercise were associated with independent risk of vascular dementia. Of biochemical risk factors, hyperhomocysteinemia (associated with low levels of folic acid and vitamin B 12), hyperlipidemia and low HDL cholesterol levels were found in both forms of vascular dementia. Some researches have argued that advanced age-the strongest risk factor for brain degeneration, male sex, smoking, sleep apnea syndrome, pre-eclampsia history and migraine also increase the risk of developing vascular dementia.

Conclusion. Analyzing data from medical literature, I can conclude that reducing these two major, but modifiable risk factors-hypertension and stroke-could be a successful strategy for reducing the public health burden of cognitive impairment and vascular dementia. Lifestyle measures that maintain or improve vascular health including consumption of healthy diets, moderate use of alcohol and implementing regular physical exercise in general appear effective for reducing vascular dementia risk