Adiposity and cerebrovascular disease

Leonardo Roever1, Poliana Rodrigues Alves Duarte1, Anaísa Silva Roever-Borges2, Elmiro Santos Resende1


EDITORIAL

Atherosclerosis is a systemic vascular disease characterized by involving of endothelial dysfunction, hyperlipidemia, lipid infiltration, inflammation, oxidative stress, and cerebral atherosclerosis is associated with ischemic stroke, can be divided into extracranial and intracranial atherosclerosis (anterior and posterior circulation). Intracranial stenosis is a narrowing of an artery inside the brain that can lead to stroke. Stenosis is caused by a buildup of plaque inside the artery wall that reduces blood flow to the brain (1-5).

Karcher and colleagues made a volumetric magnetic resonance (MR) assessment of subcutaneous and visceral body fat in 25 patients with ischemic stroke. Visceral adipose tissue showed a significant correlation with the volume of lesion load of white matter (6).

Bodenant et al., analyzed the association waist circumference, waist-hip ratio, and waist-height ratio are better predictors of stroke risk. All of these measures were associated with the risk of stroke in men (7).

Kroll and colleagues compared with BMI associations with ischemic and hemorrhagic stroke. Increased BMI was associated with an increased risk of ischemic stroke but a reduced risk of hemorrhagic stroke and in women with the highest BMI and was associated with increased risk of ischemic stroke and with reduced risk of hemorrhagic stroke (8).

Adiposity is associated with stroke, cardiovascular disease and death (9). In a study of 4631 Iranians, overweight and obesity were associated with coronary heart disease, and obesity was associated with an increased risk of stroke (10).

Kang et al., in a study of 605 women and 727 male patients, observed that overall obesity measured by BMI and by waist-height ratio had similar effects on the functional outcome after stroke in males (11).

A large cohort study should be conducted to definitively determine the clinical significance of adiposity, its correlation with stroke. Potential treatments such as lifestyle modification, ectopic fat reduction, and medications should be investigated.

REFERENCES


1Department of Clinical Research, Federal University of Uberlândia, Brazil; 2Master Institute of Education President Antonio Carlos - IMEPAC-Araguari, Brazil.

Correspondence: Dr. Leonardo Roever, MHS, Department of Clinical Research, Federal University of Uberlândia, Brazil. Telephone: +5534880339878, e-mail: leonardoroever@hotmail.com

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