Carotid web: an underrecognized cause of ischaemic stroke

Sofia Xavier¹, Miguel Quintas Neves¹, José Manuel Amorim¹, Margarida Rodrigues², João Soares-Fernandes¹, Jaime Rocha¹, João Pinho², and Carla Ferreira²

From the Porto University Center of Medicine Stroke Update Course, Porto, Portugal. 26–27 June 2018.

Abstract

Introduction: Carotid web has been recognized as a possible cause of embolic ischemic stroke, and several studies suggested that the risk of recurrent ipsilateral ischemic stroke during long term follow-up may reach 30%.

Case Report: A 54-year-old patient with medical history of hypertension and dyslipidaemia presented with speech difficulty with 48 hours of evolution. The only neurological examination finding was motor dysphasia, with non-fluent spontaneous speech and naming difficulty. Non-contrast brain computed tomography (CT) showed hypodensities in the left posterior periventricular white matter, which extended to the cortex in the posterior insular region. Brain magnetic resonance (MR) confirmed a subacute infarction in territory of the left middle cerebral artery and revealed signs of vascular kinking in the distal cervical portion of the left internal carotid artery (ICA) suggesting a vascular dilation. A CT-angiography (CTA) was done to characterize this vascular dilation, and it additionally showed a carotid web on the proximal left ICA. The patient was treated with double antiplatelet therapy. Additional aetiological investigation was negative. We decided to perform carotid artery stenting.

Conclusion: The prevalence of carotid web is low, but in young patients with cryptogenic ischaemic stroke, this aetiology should be considered, and CTA should be carefully reviewed. The optimal management of patients with carotid web is not established, and some authors suggest that carotid artery stenting may be effective in preventing recurrent strokes. Future studies could help to better understand the factors associated with the thrombogenicity of these lesions and to establish an optimal treatment strategy for each individual patient.

¹Department of Neuroradiology, Hospital de Braga, Braga, Portugal
²Department of Neurology, Hospital de Braga, Braga, Portugal

Citation: Xavier et al. Carotid web: an underrecognized cause of ischaemic stroke. International Journal of Clinical Neurosciences and Mental Health 2018; 5(Suppl. 2):O17

Published: 26 Jun 2018

© 2018 Xavier et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.