

An indolent headache revealing a megadolicho-diffuse vascular malformation

Cefaleia indolente revelando uma malformação vascular megadolicoectásica difusa

Marcelo Maroco Cruzeiro, Hugo Almeida Chaves de Resende, Igor de Assis Franco, Leopoldo Antônio Pires, Thiago Cardoso Vale

A 61-year-old hypertensive man sought neurologic consultation due to a 20-year history of a right-sided dull headache of a low frequency, mild intensity, and without additional features. Headache responded to common analgesics and was not bothersome until his brother was diagnosed with cerebral aneurysm. He then pursued a brain vascular neuroimaging study. His brain magnetic resonance angiography revealed megadolicho-vascular malformation of the intracranial part of the internal carotid arteries and some of its branches and of the basilar artery (Figure). Megadolicho-diffuse vascular malformation,

involving both anterior and posterior circulations, is exceedingly rare and there are only a handful of published cases. Most cases are asymptomatic. When symptoms are present, they can be divided into ischemic, hemorrhagic, and mass effect. Reported manifestations include cerebellar dysfunction, ischemic stroke, trigeminal neuralgia, and brainstem compression syndrome. Multiple pathophysiological processes might contribute to the development of such arterial ectasia vessels such as systemic arterial hypertension associated with atherosclerosis, what might have occurred in our patient^{1,2,3,4}.



Figure. A post-contrast 3D SPGR brain magnetic resonance imaging showing megadolichoectasias of the basilar and the bilateral internal carotid arteries (A). A post-processed 3D-TOF sequence of brain MR angiography, with an inverted window and MIP algorithm, showing a diffuse megadolichoectasia of the bilateral internal carotid arteries (B). A post-processed 3D-TOF sequence of brain MR angiography, with an inverted window and MIP algorithm, showing diffuse megadolichoectasia of the basilar artery (C). A post-processed 3D-TOF sequence of brain MR angiography, using a surface-shaded display, showing megadolichoectasias of the basilar and bilateral internal carotid arteries (D).

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Serviço de Neurologia, Departamento de Clínica Médica, Hospital Universitário, Faculdade de Medicina, Universidade Federal de Juiz de Fora, Juiz de Fora MG, Brazil.

Correspondence: Thiago Cardoso Vale; Departamento de Clínica Médica, Faculdade de Medicina; Rua José Lourenço Kelmer, s/n São Pedro – Campus Universitário; 36036-900 Juiz de Fora MG, Brasil; E-mail: thiago.vale@ufjf.edu.br

Conflict of interest: There is no conflict of interest to declare.

Received 27 March 2014; Received in final form 14 May 2014; Accepted 17 June 2014.