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<http://dx.doi.org/10.1016/j.reumae.2016.05.005>

2173-5743/

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Similarities Between Takayasu Arteritis and Giant Cell Arteritis[☆]



Similitudes entre la arteritis de Takayasu y la arteritis de células gigantes

Dear Editor,

We were very interested in the letter to the editor published in this journal in March of this year, by Drs. Martín Guillén, Álvarez de Cienfuegos and Hurtado García.¹

The case they mention brought us to make certain reflections. Our patient is a 59-year-old woman at the onset of the disease, with occipital headaches accompanied by an increase in levels of acute-phase reactants. Physical examination revealed asymmetric peripheral pulses and the same was observed in temporal pulses.

Both Takayasu arteritis (TA) and giant cell arteritis (GCA) are vasculitides that predominantly affect large-sized vessels.²

There are significant differences between these 2 disorders. Takayasu arteritis is generally found in patients under 40 years of age. It mostly involves the aorta and its major branches, whereas GCA mainly affects patients over 50 years of age, and is detected in branches of the external carotid artery. Both diseases predominantly affect women, they share pathogenic mechanisms and pathological findings, and have a similar response to treatment.

The typical symptoms of GCA are headache, loss of vision, jaw claudication and symptoms of polymyalgia. However, approximately 40% of the patients have manifestations considered atypical. Within this group, clinical involvement of the aorta and its major branches is found in 10%–15% of the patients as an initial manifestation.³ A study performed by Ostberg in autopsies of patients with GCA revealed the involvement of the aorta in 12 of 13 cases.⁴ In their cohort of 168 patients with GCA, Nuenninghoff et al. found that 27% had complications affecting the large vessels. In all, 18% had aortic aneurysm/dissection and 13% had stenosis.⁵ The majority of the cases are asymptomatic and it is underdiagnosed and, thus, its true prevalence is unknown. Patients with stenosis of the large vessels generally have fewer cranial symptoms, are found to have fewer changes in the temporal arteries on biopsies and a less marked increase in the levels of acute-phase reactants.⁵

The detection of the involvement of the aorta its branches increases notably when ancillary tests like ultrasound, computed tomography angiography, positron emission tomography with ¹⁸F-fluorodeoxyglucose (FDG-PET) or angiography are utilized.^{3,6–8}

The study evaluated 35 GCA patients who had not been treated with corticosteroids because of FDG-PET and found that 83% had increased FDG uptake in the large arteries. The involvement of the subclavian artery and aorta was observed in 74% and 54% of

the cases, respectively. The uptake of FDG had increased after 3 months of treatment with corticosteroids.⁶ In another study, computed tomography angiography showed involvement of the large vessels in 67.5% of 40 patients with GCA. Those most widely affected were the aorta (65%), brachiocephalic trunk (47.5%), carotid arteries (35%) and subclavian arteries (42.5%).⁷

In short, their patient, at the age of 64 years, has headaches but no Doppler evidence or temporal artery biopsy, and the pre-dominating signs are arterial stenoses. She may have TA, as was suggested, or could have GCA, with stenoses involving the large vessels.

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<http://dx.doi.org/10.1016/j.reumae.2016.05.004>

2173-5743/

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[☆] Please cite this article as: Antoniol MN, Perandones CE. Similitudes entre la arteritis de Takayasu y la arteritis de células gigantes. *Reumatol Clin.* 2017;13:122.