

# Re: Epidemiology of giant cell arteritis in Waikato, Aotearoa New Zealand

Vitorino Modesto dos Santos, Taciana Arruda Modesto Sugai

## ABSTRACT

The interest in epidemiological data on giant cell arteritis (GCA) increased both in New Zealand and in Latin America, resulting in updated articles like those here commented. Of more relevance are two very recent contributions by van Dantzig et al. with novel conclusive findings from their evaluations on GCA performed in the region of Waikato. The authors emphasised that the diagnosis of GCA remained stable in this region from 2014 to 2022, being uncommon among Māori, Pacific peoples and Asian ethnic groups. Short comments on some literature data from Argentina, Brazil, Colombia, Peru and Mexico about the systemic arteritis are here addressed to show the Latin American view. The authors strongly believe that this kind of report may enhance the general interest on diagnostic and management issues related to this very important systemic vasculitis.

Dear sir,  
The interest in epidemiological data on giant cell arteritis (GCA) increased both in New Zealand and in Brazil, resulting in updated articles like those here briefly commented.<sup>1-5</sup> Of more relevance are two very recent contributions by van Dantzig et al. with novel conclusive findings from their evaluations on GCA performed in the area of Waikato.<sup>1-2</sup> The first report included 214 patients diagnosed with GCA between 2014 and 2022; near 94% were European, and Māori patients were of younger age groups. The mean yearly incidence was 14.7 per 100,000 people over 50 years, similar to previous data.<sup>1</sup> The authors emphasised that the diagnosis of GCA remained stable in this region during that span of time, and is uncommon in Māori, Pacific peoples and Asian ethnic groups.<sup>1</sup> The other report retrospectively evaluated results of the fast-track pathway set up among 648 patients with GCA who had colour Doppler ultrasound (CDUS) of temporal arteries; the true positive CDUS (n=17) presented a sensitivity of 10.3% and a specificity of 99.8%.<sup>2</sup> After the negative CDUS, 376 patients were discharged without diagnosis of GCA, and reduced exposure to corticosteroids or temporal artery biopsy; patients with GCA and positive scan used significantly fewer steroids than those with GCA and negative scan.<sup>2</sup> The authors stressed the benefits of fast-track pathways to the patient's healthcare, besides a favourable effect of corticosteroids among the patients with positive CDUS.<sup>2</sup>

In this setting, it seems appropriate to present short comments on some literature data from Argentina, Brazil, Colombia, Peru and Mexico

about the systemic arteritis.<sup>3-5</sup> Worthy of note, the populations of these five countries also include European and Indigenous peoples. A cross-sectional study in six Brazilian states from 2015 to 2017 focussed diagnosis and classification of patients who had at least 6 follow-up months of Behçet disease (BD), Takayasu's arteritis (TA), GCA, polyarteritis nodosa (PAN), granulomatosis with polyangiitis (GPA), microscopic polyangiitis (MPA), eosinophilic granulomatosis with polyangiitis (EGPA) and cryoglobulinemic vasculitis (CryoVas).<sup>3</sup> In the Southeast region, the diagnoses among 1,233 patients were BD: 35%, TA: 26.4%, GPA: 16.2%, PAN: 5.8%, GCA: 5.8%, EGPA: 4.3%, MPA: 3.4% and CryoVas: 3%; in comparison, no cases of GCA were found in 103 vasculitis diagnosed in the Northeast.<sup>3</sup> A cross-sectional study included 562 patients over 18 years of age with systemic vasculitis and 6 months or more of follow-up; 345 of individuals were Brazilian and 217 were Peruvian.<sup>4</sup> The frequency of GCA was higher in Brazilians than Peruvians (9.8% vs 0.9%). Epidemiologic differences were observed in the frequency of systemic vasculitis between Brazilian and Peruvian cases, as the age at diagnosis of GPA was lower in Brazilians.<sup>4</sup> Due to the accentuated regional health disparities in the region related to socio-economic factors, specialists from the Pan American League of Associations for Rheumatology from Argentina, Brazil, Colombia, Mexico and Peru established the guidelines to treat GCA in Latin America, where the patients very often underwent an excess of glucocorticoids.<sup>5</sup> The nine recommendations and one expert opinion statement had 70% or over agreement, for

glucocorticoids, tocilizumab, methotrexate and aspirin to be utilised in the GCA.<sup>5</sup>

In conclusion, the aforementioned literature data aim to emphasise some epidemiological aspects of GCA, the most common idiopathic

systemic vasculitis of the large- and medium-sized vessels, which mainly affects individuals over than 50 years of age, and the spectrum of phenotypes may be influenced by genetic and environmental factors.

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**COMPETING INTERESTS**

Nil.

**AUTHOR INFORMATION**

Vitorino Modesto dos Santos, MD, PhD: Adjunct-professor of Internal Medicine, Armed Forces Hospital; Catholic University of Brasília-DF, Brazil.  
Taciana Arruda Modesto Sugai, MD: American Society of Neurophysiology; Dermatologist of Brasília-DF, Brazil.

**CORRESPONDING AUTHOR**

Professor Vitorino Modesto dos Santos, MD, PhD: Armed Forces Hospital, Estrada do Contorno do Bosque s/n, Cruzeiro Novo, CEP: 70.658-900, Brasília-DF, Brazil.  
Ph: +55 61 3966 2103. E: vitorinomodesto@gmail.com

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**REFERENCES**

1. van Dantzig P, Quincey V, Kurz J, et al. Epidemiology of giant cell arteritis in Waikato, Aotearoa New Zealand. *N Z Med J*. 2024;137(1592):14-21. doi: 10.26635/6965.6379.
2. van Dantzig P, White D, Kurz J, et al. Performance of a fast-track pathway for giant cell arteritis in Waikato, Aotearoa New Zealand. *N Z Med J*. 2024;137(1592):31-42. doi: 10.26635/6965.6376.
3. Belem JFM, Pereira RMR, Perez MO, et al. Epidemiologic features of systemic vasculitides in the Southeast Region of Brazil: Hospital-based survey. *J Clin Rheumatol*. 2020;26(7S Suppl 2):S106-S110. doi: 10.1097/RHU.0000000000001041.
4. de Souza AWS, Zarur EB, Pimentel-Quiroz VR, et al. Different epidemiologic profiles of systemic vasculitis between Brazil and Peru - Preliminary results in two referral centers from both countries. *Clin Rheumatol*. 2022;41(3):635-639. doi: 10.1007/s10067-021-06032-8.
5. Scolnik M, Brance ML, Fernández-Ávila DG, et al. Pan American League of Associations for Rheumatology guidelines for the treatment of giant cell arteritis. *Lancet Rheumatol*. 2022;4(12):e864-e872. doi: 10.1016/S2665-9913(22)00260-0.