

# A rare presentation of granulomatosis with polyangiitis causing bilateral temporalis muscle enlargement

Emma Samia-Aly<sup>1</sup>

Faye E Mellington<sup>1</sup>

Author details can be found at the end of this article

Correspondence to:

Emma Samia-Aly;  
emma.samia-aly1@nhs.net

A 55-year-old Caribbean man, who had previously been treated for granulomatosis with polyangiitis involving the lacrimal glands and was now off treatment, presented with an 18-month history of painless bilateral temporal swelling (**Figure 1**). He had normal visual acuity, no proptosis and full ocular motility. His computed tomography scan is shown in **Figure 2**. After discussion at a multidisciplinary meeting, a biopsy was considered but deemed unnecessary: he was diagnosed with bilateral temporalis enlargement secondary to granulomatosis with polyangiitis infiltration. As he was otherwise asymptomatic, he chose observation rather than intervention with oral immunosuppressants.

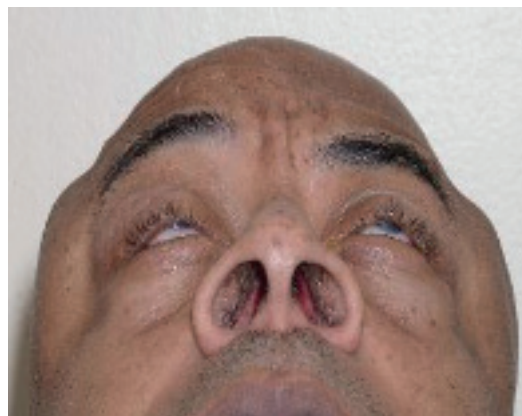
Temporalis enlargement in itself is rare, with causes including hypertrophy and infiltration of acute myeloid leukaemia (Rajput et al, 2010; Ranasinghe et al, 2018). Ocular manifestations of granulomatosis with polyangiitis occur in almost 50% of patients; involvement of the temporalis muscle has not been previously reported, but should be kept in mind as a differential (Sfniadaki et al, 2019).

## Author details

<sup>1</sup>Birmingham Midlands Eye Centre, Sandwell and West Birmingham Hospitals NHS Trust, Birmingham, UK

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**Figure 1.** Bilateral enlargement of the temporalis muscles.



**Figure 2.** Bilateral enlargement of the temporalis muscle on computed tomography.

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