

# Teaching Video NeuroImage: Bilateral Hemifacial Spasm in Giant Cell Arteritis

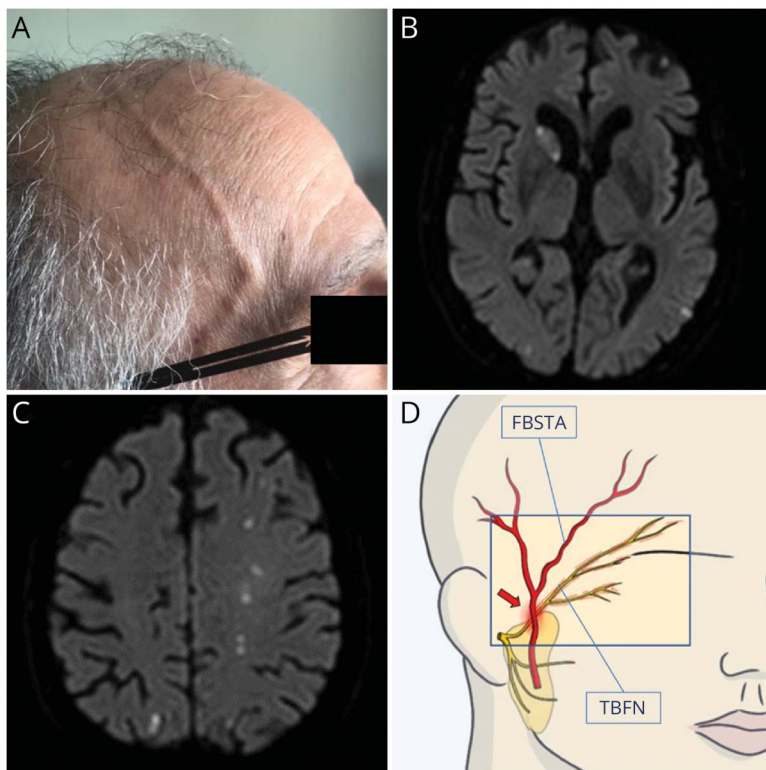
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## Figure Clinical MRI Features Accompanying the Arteritis With Bilateral Hemifacial Spasm



(A) Prominent right temporal artery. (B and C) Brain MRI DWI images showing multiple infarcts. (D) Pathophysiologic hypothesis: TBFN passes in the same anatomical region as the FBSTA and is sometimes injured in temporal artery biopsies (not performed in our patient). Temporal artery inflammation may cause TBFN irritation and hemifacial spasm predominantly involving the upper facial muscles. DWI = diffusion-weighted image; FBSTA = frontal branch of the superficial temporal artery; TBFN = temporal branch of the facial nerve.

An 80-year-old man developed bitemporal headache and scalp tenderness. Both temporal arteries were prominent (Figure, A), with halo sign on ultrasonography.<sup>1</sup> Temporal arteritis was diagnosed and oral prednisone (50 mg/d) initiated. Three days later, he developed spasms of the orbicularis oculi and frontalis muscles with eyebrow elevation and eye twitching (other Babinski sign),<sup>2</sup> consistent with bilateral hemifacial spasm (Video 1). Brain MRI and time-of-flight angiography revealed exclusively supratentorial acute infarcts (Figure, B and C) without intracranial neurovascular conflicts. Intravenous methylprednisolone (1 g/d for 5 days) was started with resolution of spasms within 24 hours and clinical stabilization. Temporal artery inflammation may cause facial nerve irritation and hemifacial spasm (Figure, D).

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### ▶ Video

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Go to [Neurology.org/N](https://Neurology.org/N) for full disclosures. Funding information and disclosures deemed relevant by the authors, if any, are provided at the end of the article.

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## Appendix Authors

Name	Location	Contribution
<b>Elia Sechi, MD</b>	University of Sassari, Italy	Drafting/revision of the article for content, including medical writing for content; major role in the acquisition of data; study concept or design; and analysis or interpretation of data
<b>Emmanuel Gallus, MD</b>	University of Sassari, Italy	Major role in the acquisition of data; analysis or interpretation of data

## Appendix (continued)

Name	Location	Contribution
<b>Paolo Solla, MD, PhD</b>	University of Sassari, Italy	Major role in the acquisition of data; study concept or design; analysis or interpretation of data
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