

Teaching Video NeuroImage: Unilateral Myorhythmia in a Patient With a Midbrain-Diencephalic Junction Cavernous Malformation

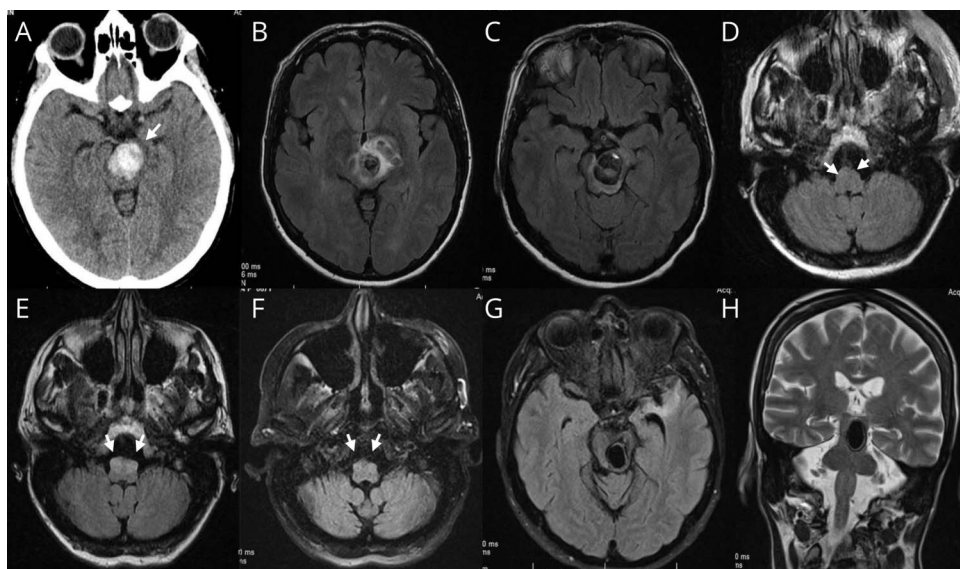
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Figure Neuroimaging



CT of the brain shows midbrain-diencephalic junction hemorrhage (A), axial MRI T2/FLAIR sequences show left midbrain-diencephalic junction hematoma in the location of the cavernous malformation (B,C), inferior olives at the time of the hemorrhage (D), olivary pseudohypertrophy (arrowheads) 1 year (E) and 7 years (F) post-hemorrhage, and cavernous malformation 7 years posthemorrhage (G). Coronal T2-weighted MRI also shows the cavernous malformation 7 years posthemorrhage.

A 60-year-old woman with a cavernous malformation at the left midbrain-diencephalic junction presented 9 months after hemorrhage and resection. She developed a palatal tremor and rhythmic, 2–3 Hz movements of her right leg (myorhythmia) 3 months earlier. Trihexyphenidyl and amantadine provided benefit (Video 1). MRI of the brain demonstrated bilateral olivary pseudohypertrophy (Figure).

A lesion in the upper 2 arms of the Guillain-Mollaret triangle leads to central tegmental tract damage, deafferentation of the olivary nuclei, and pseudohypertrophy (OH).¹ Although the connection with palatal tremor is well-recognized, myorhythmia is rarely reported. Unilateral myorhythmia with bilateral OH was described in one case.¹ Isolated myorhythmia has also been reported and should be considered as part of the spectrum (brainstem insult/lesion).²

Acknowledgment

We would like to thank the patient and her family for agreeing to participate in this report.

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 Video

Teaching slides

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Name	Location	Contribution
Diana Angelika Olszewska, MD, PhD	The Edmond J. Safra Program in Parkinson's Disease and Morton and Gloria Shulman Movement Disorders Clinic, Toronto Western Hospital, University of Toronto, Canada	Drafting/revision of the manuscript for content, including medical writing for content, and study concept or design

Appendix *(continued)*

Name	Location	Contribution
Anthony E. Lang, MD, FRCPC	The Edmond J. Safra Program in Parkinson's Disease and Morton and Gloria Shulman Movement Disorders Clinic, Toronto Western Hospital, University of Toronto, Canada	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, and study concept or design

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