NEUROSURGICAL FOCUS VIDEO

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ICG-VA application in subtemporal transtentorial treatment of a Cognard V dural arteriovenous fistula

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Intracranial dural arteriovenous fistulas (dAVF) with cervical perimedullary drainage, Cognard V, are a surgically challenging rare entity. In this video we show the disconnection of a right tentorial Cognard V dAVF, done through a subtemporal transtentorial approach with the application of indocyanine green video angiography. A 47-year-old man presented with severe tetraparesis. Only partial embolization was possible. An osteoplastic frontotemporal craniotomy was performed to obtain a wide view along with CSF release to safely mobilize the temporal lobe. Neuronavigation was used to detect the fistula and indocyanine to detect the tentorial afferent arteries and to confirm final disconnection.

The video can be found here: https://youtu.be/Yr8tAiiHNXU.

KEYWORDS Bernasconi-Cassinari artery; Cognard V; dural arteriovenous fistula (dAVF); indocyanine green video angiography (ICG-VA); subtemporal approach; video

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