Teaching Video NeuroImage: Papilledema and Cavernous Sinus Fistula Caused by Occipital Dural Arteriovenous Malformation in a Patient With Postoperative Laryngeal Cancer

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Figure Clinical and Imaging Findings

(A) Bilateral conjunctival corkscrew-shaped arterialized veins. (B) Bilateral papilledema, with severe peripapillary hemorrhage in the right eye due to the venous stasis. (C) Cerebral magnetic resonance angiography reveals abnormal vessels near right sigmoid sinus (arrows).

A 67-year-old man complained of red and bulging eyes for 3 months. He was diagnosed with laryngeal cancer and his bilateral internal jugular vein (IJV) was resected during the surgery. Ophthalmic examination revealed corkscrew-shaped arterialized conjunctival veins and severe bilateral papilledema. Magnetic resonance angiography revealed malformation vessels near the right sigmoid sinus (Figure). Cerebral digital subtraction angiography revealed an occipital dural arteriovenous malformation (AVM) near the right sigmoid sinus and venous drainage of...

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the brain with a retrograde direction to cavernous sinus, superior/inferior ophthalmic vein, and finally external jugular vein, due to the resection of IJV (Video 1). After the embolization, most of the abnormal flow disappeared (Video 2), with partially improved papilledema on late follow-up. There is a very high probability that the formation of dural AVM is a complication of the neck dissection.

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**Disclosure**
The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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**Appendix**

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**References**

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