


# Dural Arteriovenous Fistula with Hypoglossal Nerve Paralysis

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A male in his early 30s presented with a swelling just below the angle of his left mandible for the last 2 months. The swelling had insidious onset, progressive and painless. Examination found 4 × 4cm, diffuse, soft to firm, pulsatile swelling in the upper part of the neck on left side (►Fig. 1). An oral examination revealed left hypoglossal nerve paralysis. Further examination was noncontributory, including vagus and accessory spinal nerve examination. A probable diagnosis of carotid body tumor was kept, and the patient was subjected to computerized angiography.

Angiography revealed dural arteriovenous fistula (DAVF), a rare clinical entity leading to hypoglossal nerve paralysis (►Figs. 2 (A, B)). Patient was advised to undergo digital subtraction angiography for further management, but he refused and chose conservative care with regular follow-up.

Hypoglossal nerve paralysis due to DAVF is rare.<sup>1</sup> Digital subtraction angiography is the gold standard investigation, whereas endovascular embolization is the treatment of choice.<sup>2</sup> Regular follow-up with imaging is the option in a few selective cases.<sup>2–4</sup>



**Fig. 1** A diffuse swelling in the neck (white arrow) with left hypoglossal nerve paralysis (black arrow).

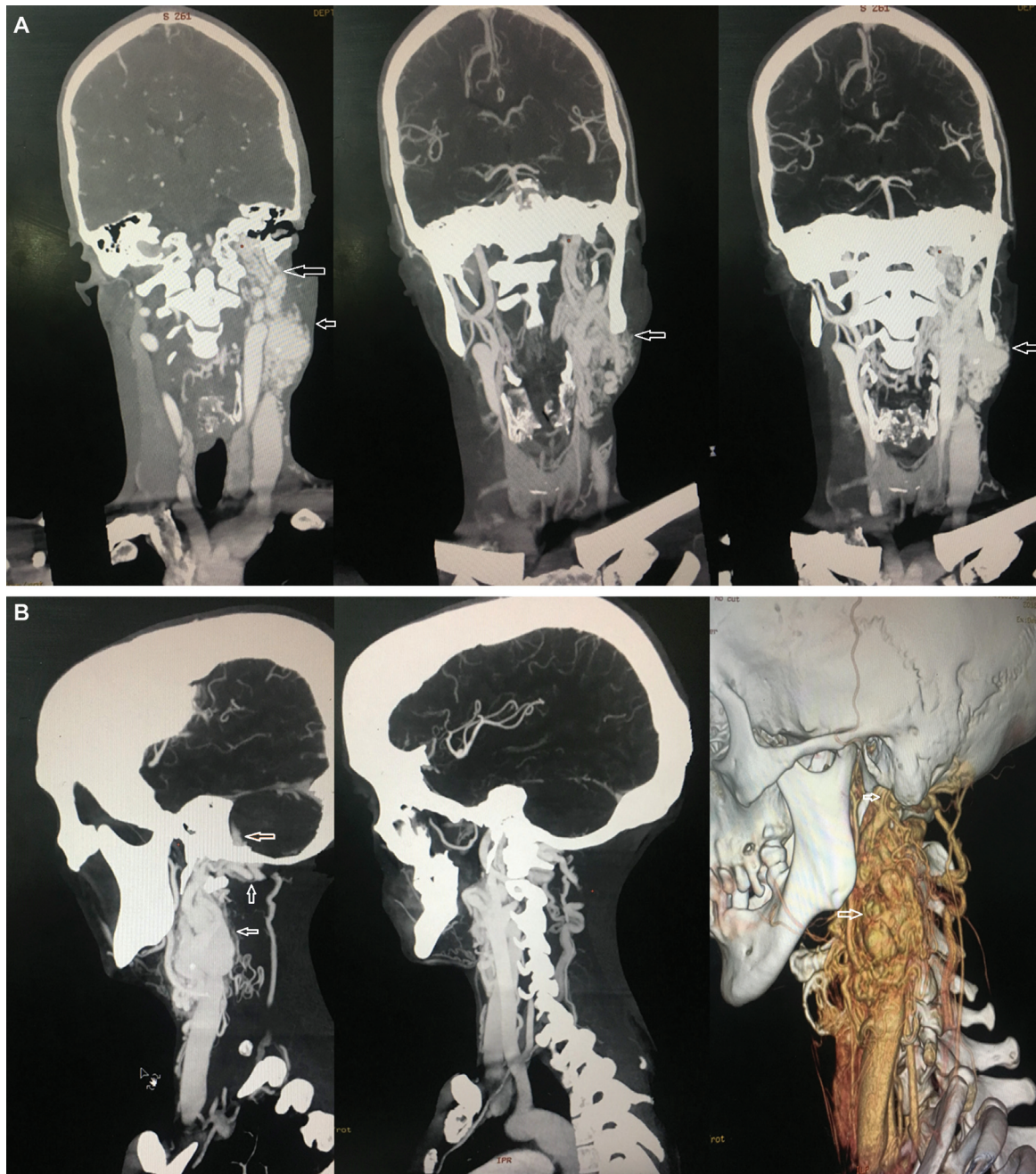
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**Fig. 2 (A, B)** Computed tomography angiography showing arteriovenous malformation in the neck and its extension into the cranial cavity with dural arteriovenous fistula (white arrows).

**Conflict of Interest**  
None declared.

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