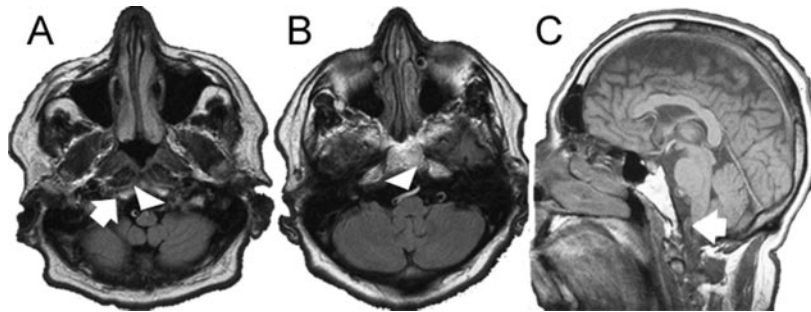


Hypoglossal-vertebral entrapment syndrome

Figure Cranial MRI revealing an ectatic right vertebral artery impinging on the cisternal segment of hypoglossal nerve



A 54-year-old man presented with nonprogressive dysarthria due to isolated right hypoglossal nerve (HN) palsy. The cranial MRI reveals an ectatic right vertebral artery impinging on the cisternal segment of HN (figure).

The hypoglossal-vertebral entrapment syndrome¹ occurs as the hypoglossal rootlets converge directly over the distorted vessel with resultant mechanical compression and direct nerve ischemia. Indeed, HN partly derives its blood supply from vertebral branches.²

Intracranial dolichoectasia is another media-involving arteriopathy with association to small vessel diseases. Validated surgical or endovascular interventions do not exist for this condition. Treatment should address identifiable vascular risk factors along with symptomatic speech rehabilitation.

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1. Rollnik JD, Sindern E, Mosler F, Spring B, Malin JP. Isolated peripheral hypoglossal palsy caused by a kinking of the left vertebral artery (hypoglossal vertebral entrapment syndrome). *Eur Neurol* 1996;36:324–325.
2. Gibo H, Marinkovic S, Nikodijevic I, Stimec B, Erden A. The blood supply of the hypoglossal nerve: the microsurgical anatomy of its cisternal segment. *Surg Neurol* 1997;48:85–91.

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