IPSilateral HYPOGLOSSAL NERVE PALSY IN INTERNAL CAROTID ARTERY DISSECTION

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Background

Internal carotid artery dissection (ICAD) is a cause of ischaemic stroke in younger patients, usually presenting with Horner's syndrome, hemiparesis and multiple nerve palsies (1). ICAD rarely presents with an isolated hypoglossal nerve palsy (2).

History

- 57-year-old male
- 3-month history of left sided tinnitus
- 1-day history of left sided odynophagia and dysphagia to solids.
- PMH – essential hypertension, migraines
- DH – amlodipine, losartan

On Examination

- Weakness of tongue
- Deviation of tongue to left side
- Ipsilateral wasting of tongue muscles
- All Cranial Nerves and neurological limb exams normal
- Audiogram – symmetrical high tone bilateral sensorineural hearing loss

Radiology

CT Neck and Angiography

- Dissection of internal carotid artery in its petrous segment

MRA Carotid

- Haemorrhagic contents in left internal carotid artery, likely to be secondary to dissection

MRI Neck and Head

- Left-sided hypoglossal palsy with diffuse oedema in the left lateral aspect of the tongue

MRI Neck

Management

Patient was referred to vascular surgery, who decided true dissection warranted aggressive antiplatelet and anticoagulation for treatment.

Conclusion

ICAD rarely presents to ENT, but it is important to recognise to perform accurate evaluation, potentially prompting aggressive medical, surgical or radiologic intervention (2).

References

1. Haneline MT, Lewkovich G. Identification of internal carotid artery dissection in chiropractic practice. J Can Chiropr Assoc. 2004 Sep;48(3):206–10.
2. Lindsay FW, Mullin D, Keefe MA. Subacute hypoglossal nerve paresis with internal carotid artery dissection. The Laryngoscope. 2003 Sep;113(9):1530–3.