

Beware of a pulsating oropharynx

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DESCRIPTION

A 45-year-old non-hypertensive woman presented with a foreign body sensation in the throat of 3 months duration. Endoscopic examination showed a pulsating swelling in the right oropharynx with intact oropharyngeal mucosa (video 1). Contrast-enhanced CT (CECT) revealed an aberrant medial course of the right internal carotid artery (ICA) 2 cm long in the lateral pharyngeal space with 3 mm of interspersed soft tissue between ICA and oropharyngeal mucosa (figures 1 and 2).

ICA after bifurcation from the common carotid artery extends to the skull base without branching in the neck.^{1 2} It lies posterolateral to the tonsillar fossa approximately 2.5 cm from the mucosal surface.² Aberrant ICA is an uncommon variant that accounts for 5% of incidental occurrences in the neck.¹ It has been classified based on its ectopic position or presence of neoplasms.³ The ectopic variation is commonly seen in the temporal bone and is either tortuous or kinking. A sharp bend denotes kinking whereas curving, elongation, undulation and redundancy denote tortuosity.^{2 3} Aberrant ICA develops either as a congenital deformity or due to degenerative vessel wall changes such as hypertension, fibromuscular dysplasia and atherosclerosis.^{2 3} Patients may be asymptomatic or may present with a foreign body sensation in the throat, dysphagia or change of voice.^{2 3} CECT, contrast MRI or angiography are gold standards in diagnosis.³

Aberrant ICA can be misdiagnosed as an abscess or a tumour, the manipulation of which can result



Figure 1 Coronal contrast-enhanced CT of the neck showing an aberrant medial course of the right internal carotid artery 2 cm long in the lateral pharyngeal space.

in torrential uncontrolled haemorrhage. Hence it is absolutely essential for clinicians to be aware of this rare but important clinical variation of ICA.



Video 1 Endoscopic video demonstrating a pulsatile mass in the right oropharyngeal wall synchronous with heart pulsations.

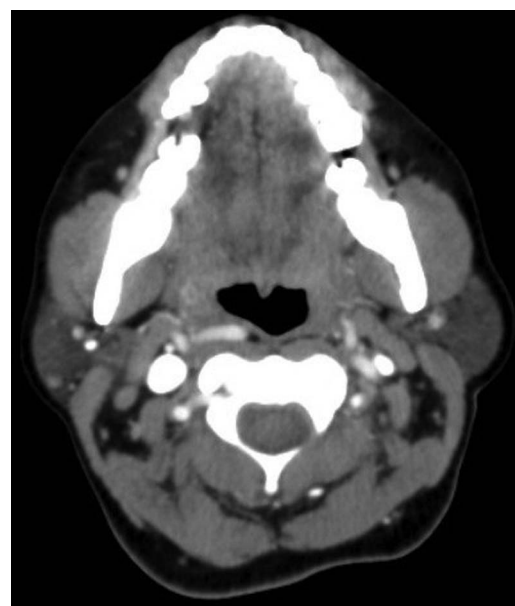


Figure 2 Axial contrast-enhanced CT of the neck showing aberrant internal carotid artery in proximity to the oropharyngeal wall with 3 mm of interspersed soft tissue.



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Learning points

- ▶ Aberrant internal carotid artery (ICA) can be due to congenital malformation or degenerative changes in the vessel wall.
- ▶ Contrast MRI and contrast-enhanced CT or angiography form the gold standard in diagnosis.
- ▶ Aberrant ICA can be misdiagnosed as an abscess or tumour in the oropharynx, manipulation of which can cause life-threatening haemorrhage.

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