Teaching Video NeuroImages: Vagus nerve schwannoma

A trigger for cough

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Figure 1 Mass on the neck

An enlarging nontender, firm, and movable mass on the right side of the neck.

A 40-year-old man presented with an insidious slowly enlarging nontender, firm, and movable mass on the right side of the neck for 3 years (figure 1). He had a 2-month history of paroxysmal cough and the cough could be elicited when the mass was palpated (video). MRI (figure 2) demonstrated that the mass involved the vagus nerve and displaced sternocleidomastoid muscle and the internal jugular vein laterally. The cough reflex is caused by stimulation of vagal nerve afferents.^{1,2} Microscopic dissection showed the tumor was in the carotid sheath and arose from a single fascicle of the vagus nerve. The pathologic diagnosis was schwannoma. After the surgery, the patient had a normal voice, with no evidence of paroxysmal cough or recurrence.

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Disclosure

The authors report no disclosures. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

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Figure 2 MRI of the tumor

Images demonstrate that the mass involved the vagus nerve (arrows) and displaced sternocleidomastoid muscle and the internal jugular vein (IJV) laterally. IJA = internal jugular artery.

Appendix Authors

Name	Location	Contribution
Meng Si, MD	Qilu Hospital of Shandong University, Shandong University	Acquisition of data, original figure illustrations, draft of the manuscript, primary clinical care of the patient
Menglin Cong, MD	Qilu Hospital of Shandong University, Shandong University	Acquisition of data, reviewed the clinical case, clinical care of the patient, revision of the manuscript
Dandan Wang, BD	Jinan Center Hospital Affiliated to Shandong University, Shandong University	Acquisition of data, reviewed the clinical case

Appendix (continued)

Name	Location	Contribution
Hecheng Ma, MD	Qilu Hospital of Shandong University, Shandong University	Clinical care of the patient, revised and approved the manuscript for intellectual content

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