



Internal Medicine Flashcard

Right eyelid droop

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1. Case description

A 59 year-old female with history of hemithyroidectomy for a benign lesion presented with 1 year of drooping of the right eyelid and anhidrosis of the right side of her face. She denied neck pain or trauma. Examination revealed ptosis of the right upper eyelid and miosis of the right pupil that was worse in dim light conditions (Fig. 1A). Thirty minutes after instillation of 0.5% apraclonidine in both eyes the ptosis resolved and the right pupil became larger than the left pupil. What is the diagnosis?

2. Discussion

This patient demonstrates the classic triad of ptosis, miosis, and anhidrosis characteristic of Horner syndrome. Horner syndrome is caused by a lesion of the oculosympathetic nerve pathway and is subdivided into central, preganglionic, and postganglionic depending on the location of the lesion. Central lesions occur anywhere between the hypothalamus and the ciliospinal center of Budge at C8-T1 in the spinal cord and can be due to infarction, trauma, demyelination, hemorrhage,

or mass lesions. A preganglionic lesion occurs between the ciliospinal center of Budge and the superior cervical ganglion at the bifurcation of the common carotid, and can be caused by a cervical rib, an apical lung mass, thoracic aortic or subclavian artery aneurysms, trauma, or thyroid tumors. Carotid dissection or aneurysm, mass lesions, or trauma can all cause a postganglionic Horner syndrome [1,2]. Horner syndrome can be confirmed if apraclonidine drops in both eyes cause reversal of anisocoria after 1 h. Apraclonidine testing has the same sensitivity as the older cocaine testing, and is much more readily available [3].

Our patient was sent for urgent magnetic resonance imaging/angiography (MRI/A) of the head and neck, which was unremarkable. Computed tomography of the chest (Fig. 1B–C) revealed a 4.9 × 3.1 × 4.4 cm mass in the right superior sulcus. The mass was removed surgically and histopathology revealed schwannoma. She has deferred ptosis repair.

Declarations of Interest

None.

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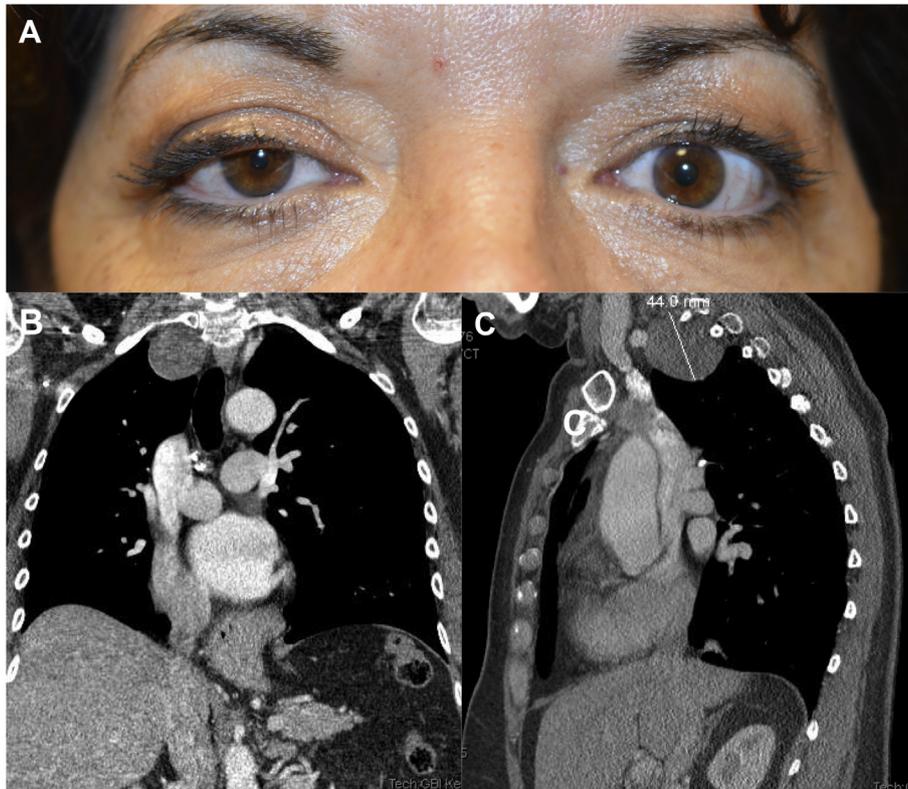


Fig. 1. External photograph showing right upper eyelid ptosis and miosis of the right eye (A). Computed tomography of the chest revealed a superior sulcus lung mass seen on coronal (B) and sagittal (C) views.

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