

A Two-Faced Young Woman

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Key Words: Pancoast-Tobias tumor, Horner's syndrome, Anhidrosis, Harlequin sign, Non-small cell lung cancer.

(*J Thorac Oncol.* 2009;4: 240–241)

A 34-year-old woman, heavy smoker, noticed after horseback riding, flushing and sweating exclusively of the left side of her face (Figure 1A). Following this she developed progressive right shoulder pain radiating to the medial side of the forearm in addition to ipsilateral ptosis, miosis, and enophthalmos (Figure 1B). She was then referred to our department for investigations. Chest radiograph showed an ill-defined opacity of the right apex and computed tomography-scan (Figure 2) confirmed a 5 cm tumor of the superior sulcus invading the thoracic inlet, including the subclavian vessels, the stellate ganglion, and the lower nerve roots of the brachial plexus, best shown on T1-weighted sagittal magnetic resonance imaging. Bronchoscopy was normal and the diagnosis of adenocarcinoma was obtained by computed tomography guided transthoracic fine needle biopsy. Concurrent chemotherapy with cisplatin—vinorelbine (four courses) and radiation therapy (46 Grays), were performed. A partial response was obtained and the patient underwent an *en bloc* resection (right upper lobectomy), extended to the first two ribs and to the lower roots of the brachial plexus.

Described separately by Tobias in 1931 and Henry Pancoast in 1932, these tumors arise in the superior sulcus of the apex. They are situated in the costovertebral gutter and may be responsible for the following symptoms: (i) shoulder pain radiating to the ulnar aspect of the forearm with decreased strength, atrophy of small muscles of the hand by invasion of C8 and T1 roots of the brachial plexus, (ii) Horner syndrome characterized by miosis, enophthalmos, ptosis, and anhidrosis ipsilateral to the tumor by invasion of the paravertebral sympathetic chain and the



FIGURE 1. A, An asymmetrical coloring of the face, right anidrosis. B, Horner syndrome characterized by mild ptosis, miosis, and enophthalmos of the right side of the face.

inferior cervical stellate ganglion, (iii) pain in the posterior upper ribs due to chest invasion. Intervertebral foraminal invasion, as well as medullar compression and paraplegia may occur.¹

This report shows originality through the presence of hemifacial sweating and flushing with Horner syndrome, known as Harlequin sign and also ipsilateral anhidrosis which was the first symptom noticed by the patient, who then took a picture of this classic but seldom seen clinical sign.

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ISSN: 1556-0864/09/0402-0240

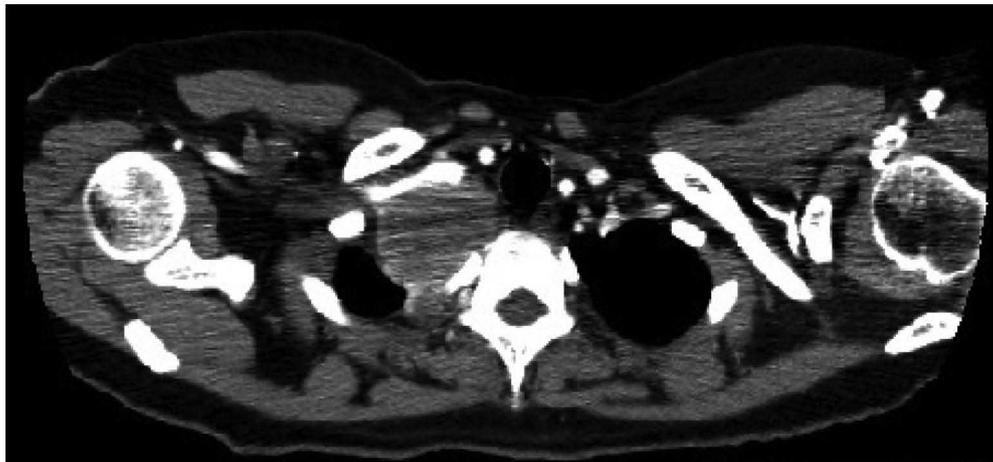


FIGURE 2. Chest computed tomography (CT)-Scan: superior sulcus tumor invading subclavian vessels and lower nerve roots of the brachial plexus.

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