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CLINICAL IMAGE

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Intrathoracic schwannoma originating from intrathoracic vagus nerve

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Abstract

In differential diagnosis of posterior mediastinal mass should be included the intrathoracic vagus nerve tumor. Surgical excision of intrathoracic vagus nerve schwannoma is associated with a low recurrence rate and excellent long-term results.

KEYWORDS

mediastinum, neurilemmoma, schwannoma, vagus nerve

1 | INTRODUCTION

A 60-year-old woman was referred to our hospital with a mediastinal mass in magnetic resonance images. The mediastinum tumor was surrounded by left atrium, descending aorta, esophagus, and left inferior pulmonary vein. The tumor was resected through the left lateral thoracotomy, and diagnosis was benign schwannoma of left vagus nerve.

A 60-year-old woman was referred to our hospital with a mediastinal mass in magnetic resonance images (MRI). The patient was asymptomatic. Chest MRI as well as chest computed tomography (CT) scan was revealed a well-circumscribed mass with smooth and clear margins without calcification. The tumor was located in the posterior mediastinal compartment (Figure 1A, B). The patient underwent a left standard posterolateral thoracotomy via the 5th intercostals space. The tumor was resected with the sparing of left vagal trunk, and the maximal diameter of tumor was 3.5 cm (Figure 2A-D). Pathological diagnosis was benign schwannoma (Figure 3). The postoperative period was uneventful, and the patient was discharged at home on day 5 post-op and she was free from a recurrence at 1-year follow-up. Neurogenic tumor frequency is 20% of all adult mediastinal neoplasms.[1] The neurogenic tumors are usually localized in the posterior mediastinum (costo-vertebral angle) and as they grow, it spread on lateral surface of the spine and the initial parts of the ribs. Unusual locations of neurogenic tumors are a phrenic nerve or one of the vagus nerves. MRI is helpful for determination of the tumor originating. Surgical excision of schwannoma is associated with a low recurrence rate and excellent long-term results.[2]

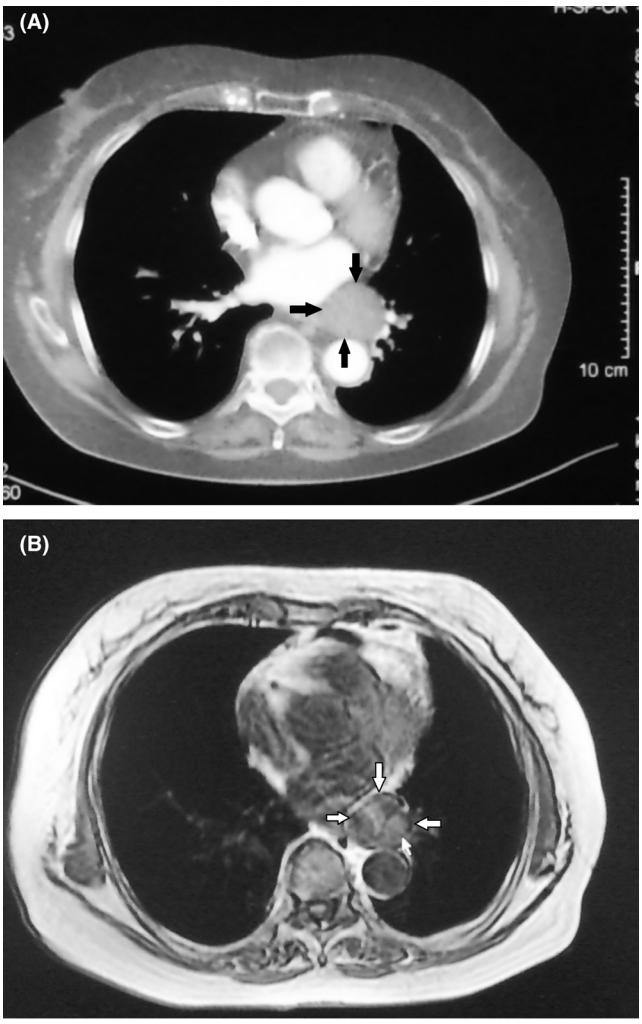

FIGURE 1 A well-circumscribed mass with smooth margin which located in the visceral mediastinal compartment (with black arrow) in the chest computed tomography scan (A) and with white arrow in the chest magnetic resonance images (B)

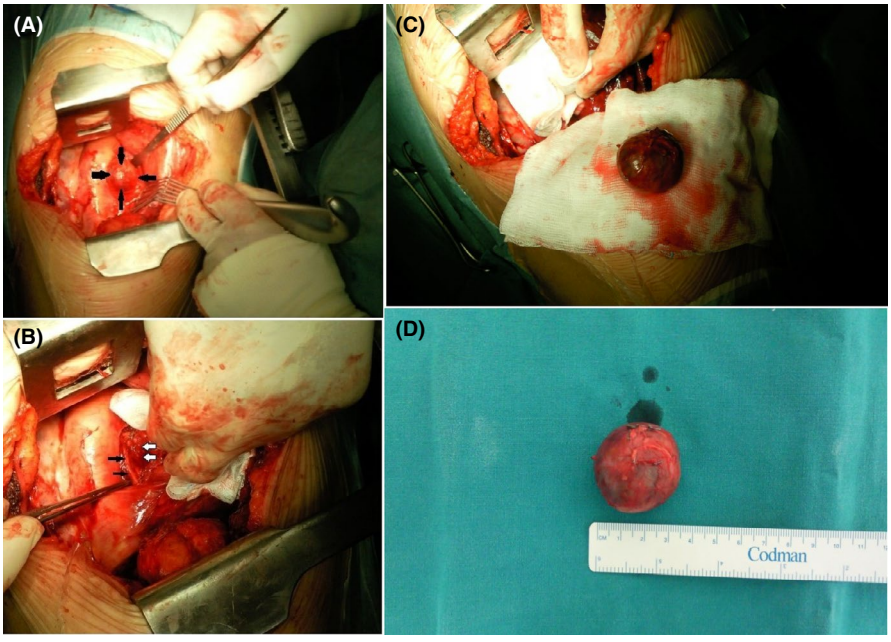

FIGURE 2 Intra-operative views. A, The tumor (black arrow) located between the left atrium, the descending aorta, the esophagus, and the left inferior pulmonary vein. B, Sparing left vagal nerve (black arrow) after tumor resection and esophagus (white arrow). C and D, Resected tumor

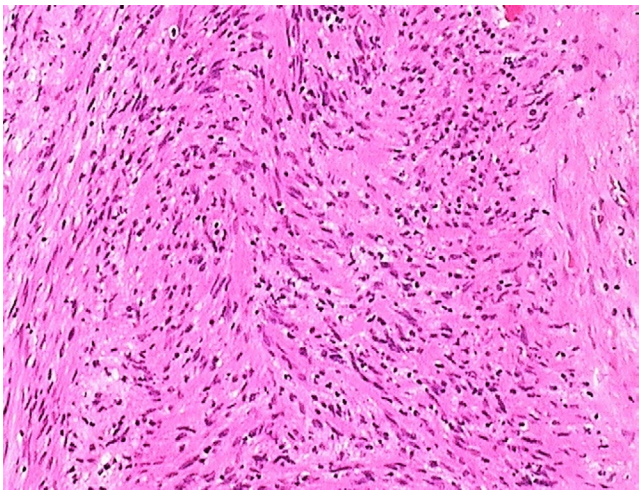

FIGURE 3 Fascicle of spindle cell without features of cytological atypia or necrosis

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All authors contributed equally in carrying out the medical literature and writing the manuscript. Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

GS: involved in medical literature search, wrote the original draft and revised the draft, and reviewed and edited the draft. MK: involved in medical literature search, wrote the original draft and revised the draft, and reviewed the draft. LK: performed pathological diagnosis. DP: supervised the draft.

ETHICAL APPROVAL

Informed consent was obtained from the patient.

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