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A middle mediastinal schwannoma: A rare case report

Orta mediasten yerleşimli schwannoma: Nadir bir olgu sunumu

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A 55-year-old female patient presented with chest pain for two months. Her medical history revealed previous breast cancer and thyroid cancer. Physical examination and laboratory test results showed no significant abnormalities. Thoracic posteroanterior X-ray and computed tomography (CT) showed a mass of 43×33 mm in size with regular contours located in the middle mediastinum. Positron emission tomography (PET) showed 18F-fluorodeoxyglucose (FDG) uptake with a maximum standardized uptake value (SUV_{max}) of 9.1 (Figure 1a-c). A written informed consent was obtained from the patient and she underwent endobronchial ultrasound (EBUS) transbronchial needle aspiration (TBNA) for the diagnosis of the mass. Cytopathological examination was reported as a benign nerve sheath tumor (schwannoma) (Figure 2a-c). The patient was offered the surgical excision; however, she refused any surgical intervention. Subsequent follow-ups with

thoracic CT did not show any progression of the mass. However, there was an increase in the SUVmax after 36 months. The patient is still under follow-up in the medical oncology clinic.

Mediastinal nerve sheath tumors commonly originate from intercostal nerves and sympathetic chain located at the posterior mediastinum.^[1] Recent studies have documented nerve sheath tumors to arise, although less frequently, from the vagus nerve, phrenic nerve, and recurrent nerve areas outside of the posterior mediastinum.^[2-4] Schwannomas are benign nerve sheath tumors of Schwann cell origin and are the most common of the neurogenic mediastinal tumors. Although they primarily arise from posterior mediastinum, they should be considered in the differential diagnosis of middle mediastinal masses. The definitive treatment for schwannomas is surgical resection with a low recurrence rate.



Figure 1. (a) Preoperative PA lung X-ray. (b) Preoperative axial thorax CT image. (c) Preoperative coronal thorax CT image. (d) Preoperative axial PET-CT image. (e) Preoperative coronal PET-CT image. PA: Posteroanterior; CT: Computed tomography; PET: Positron emission tomography.

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Figure 2. (a) EBUS/TBNA smear showing collapsed spindle mesenchymal cells in the collagen matrix, MGG, \times 11.6 (May-Grünwald-Giemsa stain \times objective magnification H-E, \times 11.6. (b) Spindle cell mesenchymal tumor in the cell block obtained from cytological material, H-E, \times 11.6. (c) Widespread S-100 positivity in tumor cells in cell block immunocytochemistry.

EBUS: Endobronchial ultrasound; FNAB: Fine needle aspiration biops; TBNA: Transbronchial needle aspiration; H-E: Hematoxylin and eosin.

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