

Calcifying Fibrous Pseudotumour of the Mediastinum

Dear Editor,

Calcifying fibrous pseudotumour is a rare, benign, tumour-like lesion that is characterised histologically by fibrotic proliferation, infiltration of inflammatory cells, and psammomatous or dystrophic calcifications, or both.¹ The cause and pathogenesis remain unclear.

We present such a case of calcifying fibrous pseudotumour in close contact with the oesophagus in the posterior mediastinum, which has not been reported before.

Case Report

A 66-year-old woman was noted on routine check-up to have a well-defined mass over her right heart border. The mass was depicted by coarse calcifications on computed tomography (CT) scan (Fig. 1A). On magnetic resonance imaging (MRI), the lesion had signal intensities consistent with dense fibrous tumour (Figs. 1B to D).

The patient had a video-assisted thoracotomy for removal of the mediastinal tumour. At surgery, the tumour was in close contact with the oesophagus in the posterior mediastinum.

On gross examination, the lesion measured 3.5 cm × 3 cm × 2.5 cm, was well circumscribed and firm. Microscopically, the lesion was composed mainly of hypocellular, hyalinised fibrosclerotic tissue with cytologically bland fibroblastic or myofibroblastic spindle cells (Fig. 1E). There was no evidence of microscopic or macroscopic infiltration into the oesophagus. Histological findings were compatible with calcifying fibrous pseudotumour. The patient was well at her 12-month of follow-up examination. There was no evidence of phrenic nerve paralysis in clinical or follow-up chest radiographs.

Discussion

Calcifying fibrous pseudotumour is characterised histologically by abundant hyalinised collagen containing psammomatous or dystrophic calcifications and a lymphoplasmocytic infiltrate.^{1,2} This unusual entity occurs predominantly in the young and has a good prognosis. It usually originates from the soft tissue of the extremities and trunk, but rarely from the mediastinum.^{2,3} The radiological

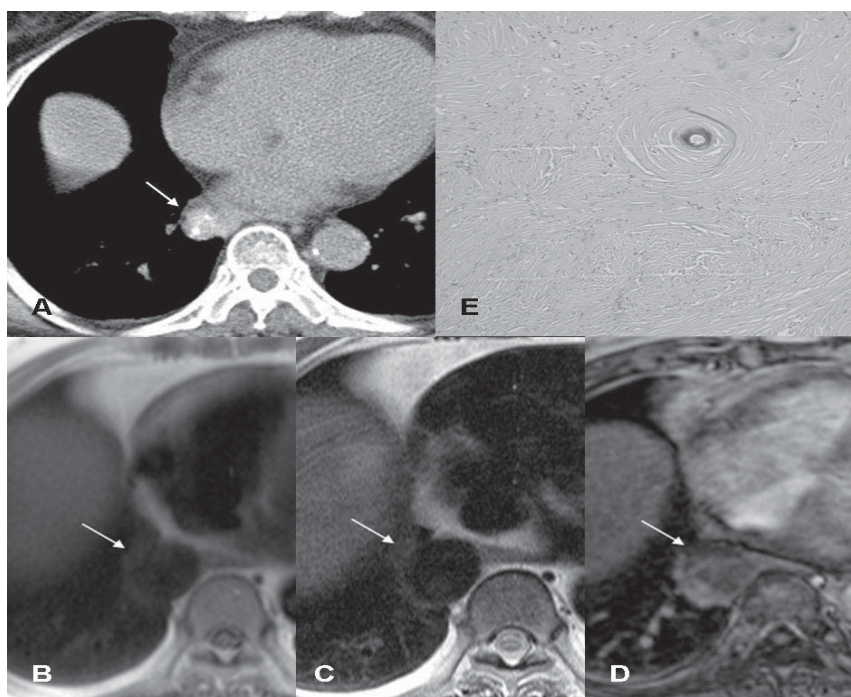


Fig. 1. (A) Pre-contrast CT scan of the chest shows a mass (arrow) with coarse calcifications over the right posterior mediastinum. (B) T1-weighted MRI. (C) T2-weighted MRI shows a mass depicted by very low signal intensity (arrow). (D) Gadolinium-enhanced MRI shows heterogeneous enhancement of the lesion (arrow). (E) Low-power photomicrograph shows dense hyalinised collagenous tissue with rare spindle cells and focal psammomatous calcifications (hematoxylin and eosin stain, ×20).

features of calcifying fibrous pseudotumour in many organs, as previously described, are well-defined dense soft-tissue masses with calcification.^{3,4} Most of the reported cases have been noted to be calcified on CT images. As in our case, the lesions have exhibited very low signal intensity on T1- and T2-weighted MRI, compatible with calcification or fibrosis as shown on histology. Preoperative CT and MRI that reveal a mass with calcifications and fibrosis may aid the diagnosis.

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