Giant oesophageal liposarcoma: case report*

Lipossarcoma gigante de esôfago: relato de caso

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Abstract  We describe imaging findings of a oesophageal liposarcoma in a 66 year old man. The computed tomography scan was performed after a chest radiograph showed a large posterior mediastinal mass. Oesophageal liposarcomas are rare tumours. They can achieve large size before they become symptomatic. Our patient was successfully managed with complete surgical removal.

Keywords: Liposarcoma; Oesophagus; Computed tomography scan.

INTRODUCTION

Gastrointestinal liposarcomas are rare tumours, with oesophagus being the least common site. Imaging findings of very few cases have been described in literature. These tumours have varied imaging appearances. Although imaging can not accurately differentiate between benign and malignant tumours, it has a pivotal role in staging and management of liposarcomas, especially oesophageal due to their close proximity to mediastinum and spine. We present imaging findings with histological correlation of such a rare entity.

CASE REPORT

A 66 year old man presented with chronic cough and mucoid expectoration. A chest x-ray was performed, which revealed a large posterior mediastinal tumour (Figure 1). The lung fields were normal. Computed tomography (CT) scan of the chest and abdomen was performed for further characterisation. CT scan showed a large, well defined, mixed density, but clearly demarcated, bi-convex mass in the posterior mediastinum.

Figure 1. Postero-anterior chest radiograph showing large, well defined, bi-convex mass in the posterior mediastinum.
predominantly fat density mass in the posterior mediastinum. The mass was engulfing the oesophagus all around (Figure 2). There was mass effect and displacement of the posterior wall of the left atrium. The tumour was encasing the thoracic aorta for at least 180 degrees. The fat plane between the mass and the adjacent mediastinal structures was effaced. More distally, the mass caused complete collapse of the oesophageal lumen. There was no mediastinal or hilar lymphadenopathy. The lung fields were normal. No abnormality detected within the abdomen. Due to mixed nature of the lesion, possibility of the malignant lesion in the posterior mediastinum was raised.

On further questioning, he gave the history of few months of difficulty in swallowing for which upper gastrointestinal endoscopy was performed in other hospital. It showed changes of Barrett’s oesophagus; no other significant abnormality was noted.

Patient underwent thoracotomy. The mass was well encapsulated, it was encircling the oesophagus, was seen free from the surrounding mediastinal structures. Complete removal of the tumour with distal oesophagectomy and oesophagogastrectomy was performed. Post operative recovery was uneventful.

Examination of the resected specimen revealed a fatty tumour that clearly arose from the submucosal region of the oesophageal wall, growing and expanding outside the oesophagus to encircle it and form a thinly-encapsulate mass 150 × 140 × 75 mm in diameters (Figure 3). The mucosa overlying the tumour was normal.

Microscopic examination (Figure 4) showed lobules of fatty tissue separated by a collagenous and myxoid stroma. There was marked variation in the size of the adipocytes with scattered uni- and multivacuolated lipoblasts, some of them apparently entrapped within the fibrous septa. These lipoblasts had large, atypical, hyperchromatic nuclei. Mitotic figures were present, numbering between 5 and 10 per ten high-power microscopic fields, but there was no necrosis. These features indicated the tumour to be a well differentiated (grade 1) liposarcoma of sclerosing subtype. The thin capsule of the lesion was intact and excision was considered complete.

**DISCUSSION**

Gastro-intestinal (GI) liposarcomas constitute about 0.1% to 5.8% of all the liposarcomas at autopsy and the oesophagus is the least common site. Oesophageal liposarcomas constitutes 1.2% to 1.5% of all GI liposarcomas(1). First case was reported in 1983(2) and since then only 15 other cases have been reported in the world literature so far. They are slowly growing tumours arising from the mucosa or submu-
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REFERENCES