Oesophageal duplication cyst: a rare cause of aero-digestive tract obstruction

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Introduction

Duplication of the oesophagus is the second most common duplication of the entire gastrointestinal tract. The duplication can be cystic or tubular.

Case report

A 33-year old man developed gradually worsening dysphagia and dyspnoea over three months. Clinical examination was unremarkable. The chest xray showed a well defined soft tissue density mass in the middle mediastinum. The CT scan showed a well defined, non enhancing, subcarinal, retrocardiac, low density lesion (13.5×12×11.8 cm) compressing the oesophagus. There was no calcification. The possibilities were bronchogenic cyst, oesophageal duplication cyst, neurentic cyst and leiomyoma. There was blood stained fluid when the cyst was aspirated at thoracotomy. The cyst wall was stripped from the oesophagus. Patient made an uneventful recovery.

The histology revealed a cyst lined by benign flat epithelial cells with lymphoid tissue, nerve bundles and smooth muscles.

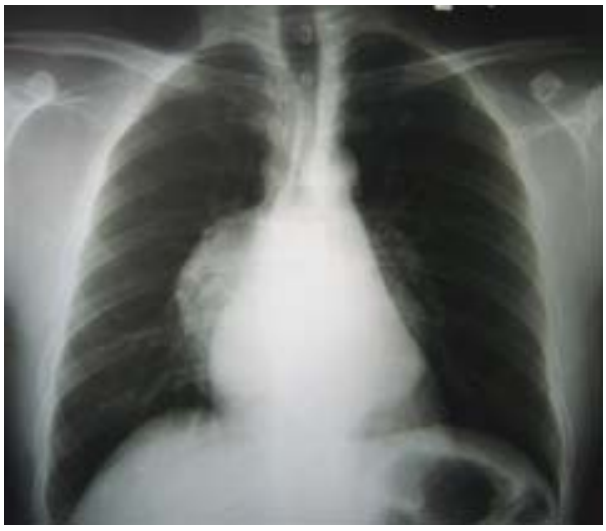

Figure 1. **The chest xray showing the cyst.**

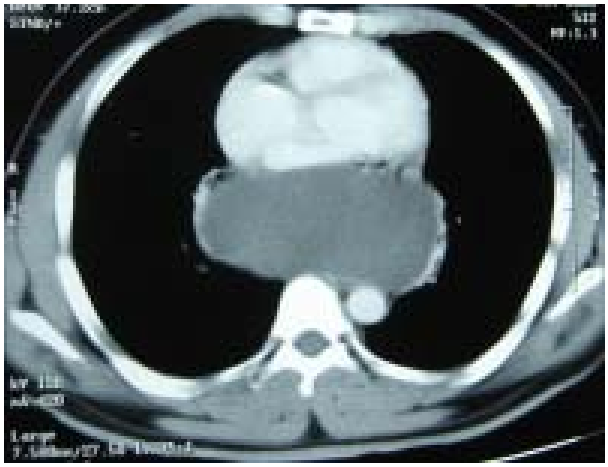

Figure 2. **CT scan of the thorax showing the cyst.**

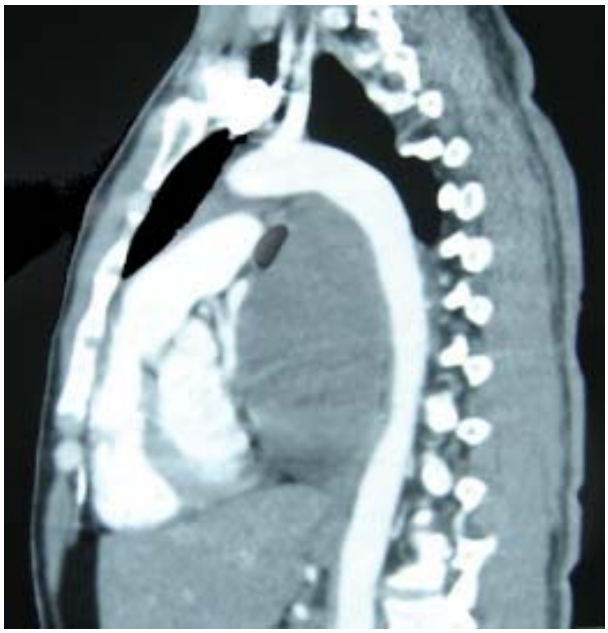

Figure 3. **CT scan of the thorax showing the cyst.**

Discussion

The exact aetiology of duplication cysts is unknown. Its prevalence is 1: 8200 among autopsies [1]. These cysts are located often in the upper thoracic region. They are

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lined by ciliated columnar, stratified squamous or rarely gastric epithelium. Most contain a clear jelly like fluid. These cysts are extramural and share the common muscular wall of the oesophagus [2]. The oesophageal duplication cysts are commonly asymptomatic. If gastric mucosa persists it may lead to ulceration, haemorrhage and perforation. An enlarging cyst can cause dysphagia, airway obstruction and repeated lung infections. Radiographically these cysts appear as a mediastinal mass. Barium studies show a filling defect indistinguishable from common tumours such as leiomyoma. At endoscopy there is a bulge with overlying normal mucosa. If the duplication cyst communicates with the oesopagus the barium fills in a blind pouch [3].

Complete surgical excision is the treatment of choice [4]. Excision is done via thoracotomy or by video assisted thoracoscopy. Regular follow up of these patients is essential as impaired propulsive activity of the oesophagus due to damage to oesophageal musculature may result in gastro-oesophageal reflux disease.

References

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