



Malignant Esophagopleural Fistula

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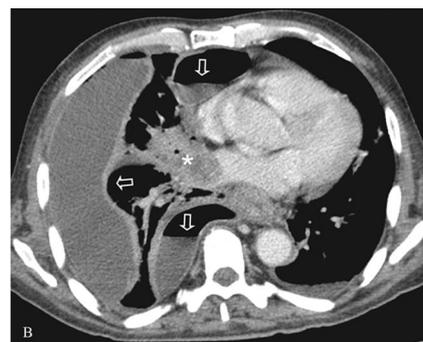
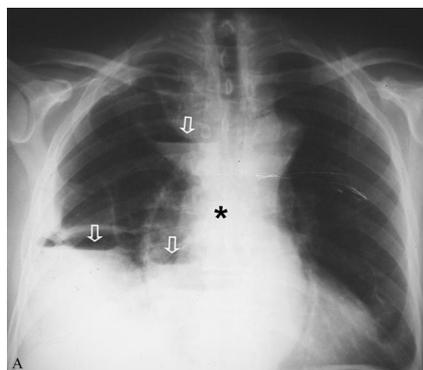
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A primary pleuroesophageal fistula is the communication between the esophagus and the pleural cavity. Pleuro-esophageal fistula is a relatively rare but life-threatening condition.

A previously healthy 60 year old man was referred with a 2 month history of chest discomfort, dysphagia and weight loss of 10 kg. On admission the patient was cachectic. His blood pressure was 125/70 mmHg and pulse 60 beats per minute. Lung, heart and skin examinations were within normal limits. Abdominal examination revealed an enlarged firm liver. Computerized tomography demonstrated a mass in the lower esophagus and multiple liver lesions suggestive of liver metastases. Upper gastrointestinal endoscopy showed a lower esophageal mass, and endoscopic biopsy of the mass was performed. Histologic examination demonstrated poorly differentiated adenocarcinoma. Five days later the patient developed severe chest pain and dyspnea. A plain chest X-ray [Figure 1] showed three right-sided pleural collections with internal air-fluid levels (arrows) deviating the heart shadow to the left. Increased density was noted over the lower mediastinum (asterisk). An axial CT section through the lower chest [Figure 2] confirmed these air-fluid levels to be within the pleura (arrows). An irregular soft tissue mass was noted to the right of the heart (asterisk), invading the right atrium. An axial CT section at a slightly higher position [Figure 3] in the chest showed an esophageal mass (asterisk) with a fistula leading to the pleural cavity (arrows). Conservative treatment with broad-spectrum antibiotics, nasopharyngeal aspiration and intravenous fluids was initiated. The patient refused any intervention and died 2 days later.

The esophagus is a hollow, viscous organ that is subject to a variety of injuries. These



may be spontaneous, trauma-induced, or iatrogenically induced. Perforation of the esophagus during endoscopy is a known complication and is extremely rare during a diagnostic procedure. However, therapeutic interventions such as biopsy, dilatation, hemostasis, stent placement, foreign body removal, cancer palliation, and endoscopic ablation techniques can dramatically in-

crease the risk of perforation. Accordingly, most endoscopic perforations occur in patients undergoing therapeutic endoscopy and in the presence of underlying esophageal lesions [3]. Patients with esophageal malignancy are especially prone to develop pathologic communication between the esophagus and adjacent structures; this complication is called a malignant esophageal fistula. Malignant esophagopleural fistula or esophagotracheal fistula occurs in approximately 5–15% of patients with esophageal cancer [1,2]. Currently, the most common cause of perforation is instrumentation of the esophagus, and the incidence of esophageal perforations has increased as the use of endoscopic procedures has become more frequent.

Management of malignant esophageal fistulas is complicated. Surgical treatment has been associated with significant morbidity and an exceedingly high mortality rate. Esophageal stenting seems to be the most reasonable palliative measure, with 80–100% effectiveness of covered self-expanding metal stents reported in recent studies [2].

References

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