Images in Medicine

Oesophago-pleural fistula secondary to oesophageal tuberculosis resulting in bilateral empyema

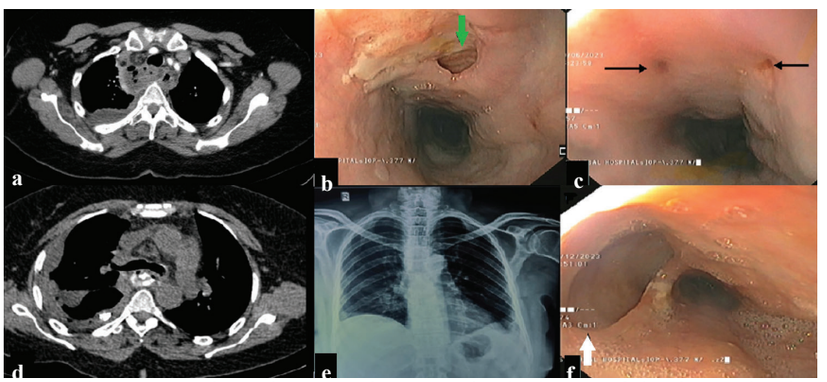

FIG 1. (a) Contrast-enhanced computed tomography (CT) scan of the thorax showing mediastinal air collection with right pleural effusion; (b) upper gastrointestinal endoscopy showing one large fistula with ulcer (green arrow) (c) two small fistulous opening in the upper third of the oesophagus (black arrows); (d) CT thorax with oral contrast showing long segment intramural dissection of oesophagus with leakage of contrast in the mediastinal space and pleural space; (e) normal chest X-ray at 2 months of antitubercular treatment; (f) endoscopy at 6 months showing healed ulcer with formation of diverticulum (white arrow)

A 52-year-old female presented with breathlessness, high-grade fever, right-sided chest pain, and difficulty and pain during swallowing for 3 days. She was in acute distress with type 1 respiratory failure. Contrast-enhanced computed tomography (CT) of the thorax (Fig. 1a) showed bilateral pleural effusion with a few air foci along with diffuse wall thickening of the oesophagus. Bilateral intercostal drains were inserted that drained pus, which grew *Escherichia coli* and *Klebsiella pneumoniae*. Upper gastrointestinal (GI) endoscopy showed one large fistulous opening 13 cm from the central incisor (Fig. 1b), and two fistulae 1–2 cm from the first fistula (Fig. 1c). Bronchoscopy was normal. CT of the thorax with oral contrast showed a long segment oesophageal intramural dissection from C7 to D10 vertebral body with breach of its serosa at multiple points, resulting in pneumomediastinum with leak of contrast into the mediastinal and pleural space (Fig. 1d). Tuberculosis polymerase chain reaction of the oesophageal biopsy was positive for *Mycobacterium tuberculosis*. The patient was started on antitubercular treatment (ATT) and nasojejunal feeds. Chest X-ray at 2 months was normal (Fig. 1e). ATT was continued for 6 months. Endoscopy at the end of 6 months showed that the first fistula was converted into a diverticulum (Fig. 1f), which was closed by surgical clipping with complete healing of the other two fistulae. Primary oesophageal tuberculosis complicated with oesophago-pleural and oesophago-mediastinal fistulae is an unusual entity with a non-specific presentation carrying high mortality and morbidity.[1] CT plays an important role both in the diagnosis and management of such patients.[2]

REFERENCES

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