Traumatic Oesophageal Perforation

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History

• A 73 YR female was referred for urgent CT examination in the evening

• NECT thorax done, images in axial, coronal and sagittal planes studied.
Figure 1: Bedside CXR

Bedside CXR The tip of Ryle’s tube is in right side thorax, just above right dome of diaphragm.
Figure 2: NECT axial thorax at T5 level shows double lumen in mid-oesophagus- A soft tissue mass involving lower third oesophagus was seen distally.
Figure 3: NECT axial thorax at T 7 level shows a lung cavity in right lower lobe communicating with the oesophageal lumen. All gastric contents seen to be aspirated into the lung cavity.
Figure 4: - NECT coronal thorax shows large air pocket in midline communicating with lung cavity
Figure 5: NECT sagittal thorax shows false lumen in oesophagus
Nect Thorax Image Interpretation

- There is oval shaped opacity with central cavitation, in right lower zone, extending to midline.
- The opacity shows abnormal pockets of air collection, appears to communicate with oesophageal lumen, at T7 level. The central cavity contents appear, morphologically, similar to gastric contents.
- There is bilateral pleural effusion R > L, transudate nature.
- Upper third oesophagus is dilated, max diameter is 4 cm.
- Lower third oesophagus is eccentrically narrowed from T6 level.
- Air fluid level is seen in mid oesophagus, with a possible false lumen is seen.
- Upper limit of false lumen is seen at T1 level.
Final Diagnosis

Advanced oesophageal malignant neoplasia traumatic oesophageal perforation.
Discussion

Esophageal perforation is a life-threatening injury, needing prompt surgical intervention in most cases. Despite significant advances in modern surgery and intensive care medicine, esophageal perforation continues to present a diagnostic and therapeutic challenge. Untreated perforations in the thoracic esophagus usually cause severe mediastinitis with a high mortality rate.

Esophageal perforation may have different etiologies. The risk of perforation with diagnostic flexible esophagogastroduodenoscopy is 0.03%. The risk of perforation can dramatically increase secondary to therapeutic procedures such as stricture balloon dilatation bouginage, placement of NG tubes (as in our case), stents, or foreign body removal. It has been estimated that 33–75% of all esophageal perforations are iatrogenic.
Reference