Brief Communication

Spontaneous Oesophagopleural Fistula as the Underlying Cause of Hydropneumothorax

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Abstract

Boerhaave syndrome consists of spontaneous longitudinal transmural rupture of the oesophagus, usually in its distal part. It generally develops during or after persistent vomiting as a consequence of a sudden increase in intraluminal pressure in the oesophagus. It is extremely rare in clinical practice. It is manifested by Mackler's triad: vomiting, chest pain and subcutaneous emphysema which is actually uncommon. **[Indian J Chest Dis Allied Sci 2019;61:153-154]**

Key words: Spontaneous oesophagopleural fistula, Boerhaave's syndrome, Mackler's traid.

Cases of pneumothorax or hydropneumothorax are not rare in the Department of Pulmonology but what was the cause for hydropneumothorax was rare and made us to report this case. A high index of suspicion should be there in dealing a case with pneumothorax or hydropneumothorax with chest pain, breathlessness following vomiting. Spontaneous rupture of oesophagus is characterised by a higher mortality rate if not diagnosed early. In this report, we are presenting a case of spontaneous oesophageal rupture as the underlying cause of hydropneumothorax. All pulmonologists should keep in mind and investigate to rule out this rare cause in alcoholics.

A 30-year-old male patient, professional driver, came to emergency department with chief complaints of left-sided chest pain and breathlessness for the past six days. Patient's illness started as chest pain following a binge drinking of alcohol six days back which was followed by 6-8 episodes of vomiting. Patient was taken to local hospital and was treated with antibiotics, parenteral fluids as a case of food poisoning. Chest pain was sudden in onset and gradually progressive, initially localised to centre of the chest and then radiating to back of the chest and upper abdomen. Later, this was localised to left anterior lower chest. Pain not relieved with analgesics. Breathlessness of insidious onset, gradually progressive grade 2 to grade 4, relieved on lying down to the left side associated with palpitations. No past history of similar complaints of wheeze, fever or trauma. Not a smoker but alcoholic for the past five years. Bowels and bladder are regular. Pleural fluid analysis showed a pH-6.8, glucose-40mg/dL, protein 4.2g/dL, suggestive of exudative pleural effusion. Pleural fluid showed adenosine deaminase level of 22 u/L, and amylase of 3570 IU/mL. No organisms were isolated after 48 hours of aerobic incubation. Smear examination for acid-fast bacilli on Gram's stain was negative and no fungal elements were observed.

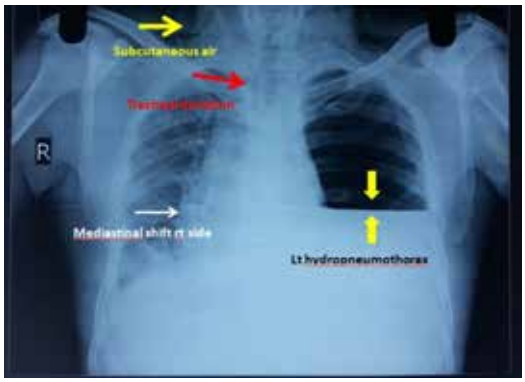

Figure 1. Chest radiograph (postero-anterior view) showing a left hydropneumothorax.

Figure 2. Contrast radiograph (posterior anterior view) of chest showing an extravasation of gastrografin dye into the left pleural cavity above gastroesophageal junction.

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A diagnosis of left-sided pyopneumothorax with oesophagopleural fistula due *to spontaneous oesophageal rupture (BOERHAAVE'S SYNDROME)* was made based on findings of chest radiograph, (left hydropneumothorax) raised amplyase levels and air around oesophagus with oesophageal thickening near gastroesophageal junction and extravasation of gastrograffin dye into left pleural cavity. Patient was managed conservatively with broad-spectrum antibiotics, and total parenteral nutrition. Patient was referred to department of surgery for further management.

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