Case Report

Rare case of achalasia cardia shadowed by pyopneumothorax
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INTRODUCTION

Achalasia is defined as a failure of organized peristalsis in the esophagus and failure of relaxation at the level of the lower esophageal sphincter. Achalasia can initially present with a variety of symptoms that impair a patient’s quality of life, work productivity, and functional status.[1-3] The actual cause is unknown, but it can be categorized as (a) primary achalasia and (b) secondary achalasia (pseudoachalasia) caused by malignant tumor at the gastroesophageal junction or less commonly, by benign condition such as Chagas disease. Both structural and functional changes in the lungs can be seen in patients with achalasia.[4]

CASE REPORT

We report a case of a 54-year-old chronic smoker male presented with complaints of cough with sputum for 6 months, fever (on and off), shortness of breath, and chest pain and dysphagia. The chest X-ray showed air-fluid level on the left side with a mediastinal shift to the right side. Diagnostic thoracocentesis was done which showed the presence of frank pus. Presumptive diagnosis of the left-sided tubercular pyopneumothorax was made as Mycobacterium tuberculosis is the most common cause of pyo in India. In view of repeated complaint of dysphagia, barium swallow was done which showed the tapered narrowing of the distal esophagus “(bird’s beak)” appearance. Contrast-enhanced computed tomography (CECT) showed the left upper lobe consolidation with large left-sided hydropneumothorax, dilated esophagus with tapering in the distal part. Based on the above investigations, we diagnosed the patient to have achalasia cardia which leads to pyopneumothorax due to repeated aspiration pneumonitis. Pyopneumothorax most commonly occurs as a complication of infection. It can occur as a complication of aspiration pneumonia. Achalasia cardia is a rare cause. Therefore, in a patient having recurrent episodes of pyopneumothorax, a history of dysphagia and recurrent episodes of vomiting and regurgitation needs to be elicited as this may be attributed to achalasia cardia.

KEY WORDS: Achalasia cardia, auerback’s plexus, pyopneumothorax
On percussion, a hyper-resonant note was present over left infraclavicular, axillary, and suprascapular area and the stony dull note was present over the rest of the left hemithorax.

On auscultation, breath sounds were absent over left hemithorax and a succussion splash was present.

Chest X-ray was done in the emergency department which shows air-fluid level on the left side with mediastinal shift to the right side.

Diagnostic tapping was done which shows the presence of frank pus.

The diagnosis of the left-sided pyopneumothorax was made. The patient complaint of vomiting still persisted and on a detailed history, we found that the patient had discomfort after ingestion for which he self-induced to vomit and got relieved. We assumed it to be an obstructive or a functional pathology. Barium meal was done which showed the tapered narrowing of the distal esophagus “(bird’s beak)” appearance. CECT showed a large left-sided hydropneumothorax with few patches of consolidation and fibrosis in left upper lobe along with tree in bud appearance in right lung. Dilated esophagus with tapering in the distal part, most likely achalasia cardia.

The patient was treated initially by putting an implantable cardioverter-defibrillator in the left fifth intraoperative cell salvage and referred to a higher center for surgical correction.

DISCUSSION

Primary achalasia is a rare disorder of unknown etiology characterized by incomplete relaxation of the lower esophageal sphincter due to the loss of the ganglion cells in the myenteric (Auerbach’s) plexus. Dysphagia, regurgitation, weight loss, chest pain, or discomfort are the common symptoms. Commonly observed radiological findings include mediastinal widening, air-fluid levels, and absence of gastric air bubble. Presentation of achalasia cardia with respiratory complication is far more rare entity with most common respiratory complications as aspiration pneumonia, lung abscess, pyopneumothorax, and pneumothorax.

Our patient did not manifest any of these classical symptoms. On the contrary, his complaints were predominantly related to the respiratory system. It is likely that recurrent episodes of aspiration of esophageal contents into the respiratory tract would have contributed to the occurrence of respiratory symptoms. The diagnosis was suggested on CECT of the thorax and confirmed by a barium swallow radiograph.

CONCLUSION

Repeated complaint of vomiting should be thoroughly evaluated by its nature; likewise, in this case, severe respiratory complications like pyopneumothorax would have been avoided if evaluated carefully.

REFERENCES