

Carcinoma Esophagus Masquerading as Pyothorax

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Abstract: Esophageal cancer most commonly presents with upper digestive symptoms such as dysphagia or vomiting. We report a case of 52-year-old man who sought medical attention for vague upper abdominal pain without dysphagia, left sided chest pain and high grade fever. On clinical evaluation and routine investigation with a chest X-Ray found to have left sided hydro-pneumothorax. On ICD insertion thick purulent fluid with food particles drained. On further evaluation, patient was diagnosed with carcinoma esophagus: squamous cell carcinoma with an esophageal-pleural fistula. Presentation of esophageal cancer directly as pyothorax without any preceding symptomatology is not an everyday phenomenon. This case reinforces the value of having an open mind in diagnoses, especially in context of unusual or non-specific symptomatology.

Keywords: Esophageal cancer, pyothorax, Squamous cell carcinoma, Trachea-esophageal fistula.

INTRODUCTION

Esophageal cancer (EC) is the fifth leading cause of death in men from cancer worldwide [1]. Men were more affected, with the median age at diagnosis 68 years [2]. EC is the sixth and eighth most common cancer in males and females respectively in India [3]. The age adjusted incidence rates (AAR) of esophageal cancers in both males and females is high in this part of the country and among the highest in the world. The AAR ranges from 27-71.4/100,000 population in males to 18.3-30.2/100,000 populations in females [4].

Clinical presentation is similar for all types of esophageal cancers. The most common symptoms are dysphagia and odynophagia [1]. Other less common ones include hoarseness, cough and dyspnea [5]. More than a third of patients with ESCC (Esophageal squamous cell carcinoma) present with metastatic disease. The metastases are usually in the lymph nodes, liver, lungs and bones [1].

The initial investigation includes an upper GI endoscopy or a barium-swallow examination. To exclude metastasis, a computed tomography (CT) scan of the chest, abdomen and pelvis should be performed [5]. The stages of esophageal cancer are defined according to the American Joint Committee on Cancer Staging system. Treatment is based on this staging and includes endoscopic mucosal resection, surgery, radiotherapy and chemotherapy [6].

CASE REPORT

We report a case of 52-year-old man who sought medical attention for vague upper abdominal pain, left sided chest pain and high grade fever. On clinical evaluation and routine investigation with a chest X-Ray found to have left sided hydro-pneumothorax.



Fig-1: Erect X-Ray Abdomen

ICD was inserted, following which thick purulent fluid along with suspicious food particles was drained. This finding made us suspicious of something more sinister hiding inside. Patient was further subjected for evaluation with barium swallow and endoscopy.



Fig-2: Barium swallow

On endoscopy it showed growth from lower third of esophagus, biopsy taken revealed squamous cell carcinoma. Trachea-esophageal fistula was picked up from barium swallow which explained the suspicious food particles obtained on ICD insertion. On analysis of pleural fluid, acute inflammatory cells mainly neutrophils (90%) occasional mesothelial cells (10%) found, and on culture *Escherichia coli* was obtained.

DISCUSSION

ESCC was not our initial hypothesis because of our patient's overall atypical presentation. First, the median age at diagnosis is 68 years with only 12% of patients between 45 and 54 years of age [2]. Our patient was a 52-year-old man. Second, he did not have dysphagia or odynophagia, which are the most common symptoms of esophageal cancer according to the literature [1]. His main symptom was vague upper abdominal pain. When pain is present in ESCC, it is usually thoracic or radiating to the back [1], but can occur less often in the upper abdomen [5]. Our patient also had no significant amount of weight loss. When patients with esophageal cancer seek medical assistance, the majority experience anorexia and weight loss [1].

There are two major types of esophageal cancer: ESCC and esophageal adenocarcinoma (EAC). Together, they represent more than 90% of primary esophageal carcinomas. There are numerous identifiable risk factors. Tobacco use and previous radiotherapy for breast cancer are major known risk factors for both EAC and ESCC [5]. ESCC risk is also increased with alcohol consumption, caustic injury to the esophagus, achalasia, tylosis (nonepidermolytic palmoplantar keratoderma), Plummer-Vinson syndrome and a history of head and neck cancer. The known risk factors for EAC are chronic gastroesophageal reflux disease and Barrett's esophagus [6].

ESCC is an aggressively invasive tumor [5]. Our patient was diagnosed with advanced ESCC, according to the American Joint Committee on Cancer

Staging system, rendering immediate surgery impossible [1]. The best treatment for our patient was to perform tenting followed by concomitant radio-chemotherapy, which improves 5-year survival in 25% of patients [7]. Our patient refused radio-chemotherapy citing financial concerns; hence he was referred to KIDWAI institute of Oncology, Bangalore, a government institution for further treatment and management.

CONCLUSION

This was one of the rare presentations of carcinoma esophagus, with vague symptomatology and working diagnosis of pyo-thorax. On further evaluation, patient was diagnosed with carcinoma esophagus squamous cell carcinoma from lower third with an esophageal- pleural fistula. This case reinforces the value of having an open mind during diagnoses, especially in context of unusual or non-specific symptomatology.

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