

Case Report
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A Case Report of Tracheoesophageal Fistula in Esophageal Carcinoma

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Introduction

A tracheoesophageal fistula (TEF) is a congenital or acquired communication between the trachea and esophagus. Acquired TEFs may occur in individuals of any age, and elderly individuals are at increased risk. Causative factors of acquired TEFs include malignancy, trauma and various iatrogenic causes.

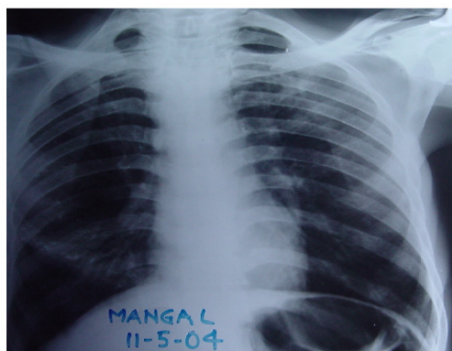
The advanced esophageal carcinoma can be complicated by fistulas. Pathological communication between the esophagus and adjacent structures caused by the neoplastic process is also called a malignant esophageal fistula. According to published data, the incidence rate of malignant esophageal fistulas is about 13%.

Case Presentation and History

A 46-year-old smoker male presented to us with complaints of chest pain, cough on swallowing, hemoptysis for 2 weeks and dysphagia for two months. The patient also gave a history of loss of appetite associated with loss of weight. He did not have a history of tuberculosis in the past. On clinical examination, he was found to be averagely built and poorly nourished with normal vital parameters. He had no evidence of lymphadenopathy but was anaemic. Respiratory system examination was within normal limits.

Assessment

On investigation, Haemoglobin was 7.5 gm/dl, TLC - 7,800/mm³, and the rest of the haematological and biochemical profile was normal. Chest radiograph and ECG were also normal. PPD showed no induration.

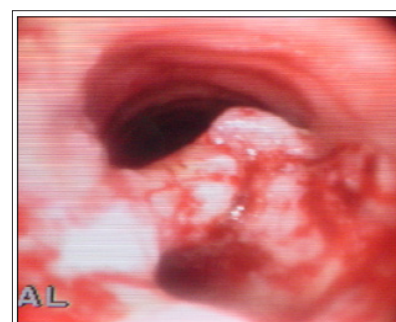


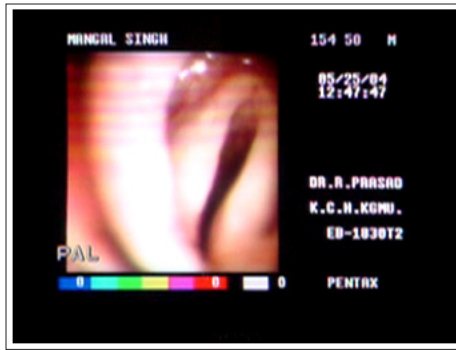
- CECT thorax revealed an irregularly enhancing concentric thickening of the wall of the oesophagus just above the carina,

causing narrowing of the lumen of the oesophagus with proximal dilatation and holding-up of contrast agent and also communication of trachea and esophagus suggestive of Tracheo-esophageal Fistula.



Fibreoptic Bronchoscopy was Done which Revealed a Circular Ulcero-Proliferative Growth.





Management

It has been reported that trachea esophageal fistula occurs in 5–15% of esophageal cancers. In an advanced esophageal cancer complicated by a fistula, chemoradiation is the primary treatment modality. However, esophageal cancer that forms a tracheobronchial fistula can lead to inability to tolerate oral feeding as well as respiratory symptoms and pneumonia, all of which markedly decrease a patient's quality of life. These patients are generally quite ill and have a poor prognosis.

Stents are now commonly employed in cases of esophageal cancer complicated by respiratory tract fistulae, with many patients able to resume oral feedings within a few days after stent placement. Another option for advanced esophageal cancer with tracheobronchial fistula is percutaneous endoscopic gastrostomy. In patients with prolonged pneumonia before an operation, inflammation often improves within a few days postoperatively. Oral feeding is typically started on the 7th day after the operation. Upon discharge, pending the patient's overall general condition, chemoradiation therapy is performed to improve prognosis.

Clinical Implications

TEF, together with malignant esophageal and pulmonary tumors, can be fatal apart from the carcinoma itself. This is largely due to the fact that most of these patients cannot undergo surgery owing to their poor overall condition. In these cases, stents offer an alternative to major surgery and can sometimes be a superior way to alleviate symptoms. In general, two main types of stents are used currently.

Covered self-expanding stents are relatively simple to insert, can firmly expand and cover the damaged area, and have a low migration rate. Most TEF is due to malignancy with the patients having a short survival time. The treatment of TEF is a tough challenge. Although the efficacy has been achieved after application of interventional therapy, the treatment strategy should be improved continuously to make the patients live a better and longer time [1-5].

References

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