

## Esophago-pulmonary Fistula in Advanced Esophageal Cancer. Case Report

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### Abstract

**Background:** In all esophago-respiratory fistulas due to esophageal cancer the incidence of esophageal fistula restricted to lung parenchyma is considered to be in the range of 3% to 11% of all cases.

**Case Description:** A 62-year-old patient with a history of smoking and alcoholism was admitted presenting fever, dyspnea and cough with mucopurulent expectoration. CT scan showed esophageal wall thickening, pneumomediastinum and right intrapulmonary abscess formation. The patient underwent right thoracoscopic approach in prone position to provide better drainage and washing.

**Conclusions:** The malignant esophago-pulmonary fistula should be considered in the differential diagnosis of a lung abscess which does not follow a typical course.

**Keywords:** *Esophago-Respiratory Fistula; Esophago-Pulmonary Fistula; Squamous Cell Carcinoma*

### Background

The incidence of esophageal fistulas restricted to lung parenchyma is considered to be in the range of 3% to 11% in all esophago-respiratory fistulas due to esophageal cancer. The objective of this presentation is to report a case of a patient with malignant esophago-pulmonary fistula [1,2].

### Case Description

A 62-year-old patient with a history of smoking and alcoholism was admitted to the Emergency Department of Diagnostic Institute presenting fever, dyspnea and cough with mucopurulent expectoration. He also reported dysphagia and weight loss of 10 kilos over the past three months. Blood analysis showed 20,000 leukocytes/ul. Computed tomography (CT) scan showed esophageal wall thickening, pneumomediastinum and right intrapulmonary abscess formation. Esophagogastroduodenoscopy confirmed stenosis and ulceration at the middle third of the esophagus with outflow of purulent material from which biopsies were taken. The treatment was started to suppress oral intake, placement of nasogastric tube for feeding, culture and antibiotic therapy. The endoscopic stent therapy was not considered due to the progressive septic aggravation. The patient underwent right thoracoscopic approach in prone position to provide better washing and drainage. His course was complicated by respiratory distress, and death occurred 10 days after surgery. Anatomopathological study revealed squamous cell carcinoma of the esophagus.



Figure 1: X-ray.

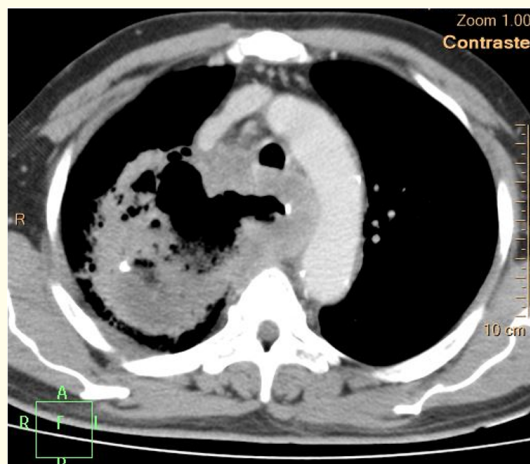
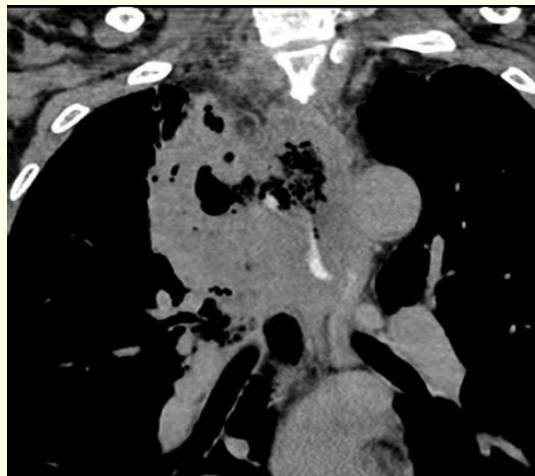
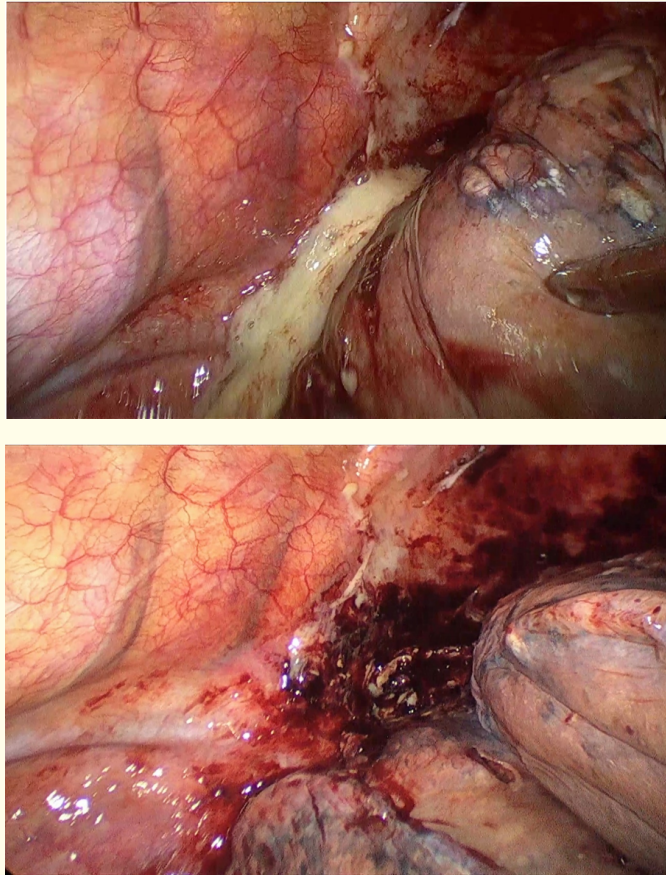


Figure 1: CT images.



**Figure 3:** Thoracoscopic approach in prone position.

### Discussion

The malignant esophago-pulmonary fistula is a rare condition. It usually appears in patients with locally advanced squamous cell carcinomas when invading the lung parenchyma rather than the tracheobronchial tree. This is a cause of necrosis and fistulas resulting in pulmonary abscess formation [2-4]. It is a dreadful complication with high mortality and the diagnosis is usually not simple, although it is usually confirmed based on clinical and endoscopic findings, esophagogram and CT images. The treatments should be immediately initiated after the diagnosis aiming at symptom alleviation. These may be either by means of endoscopic stents, esophageal by pass, wide resections or only drainage, depending on the patient's general condition [5,6].

### Conclusion

In conclusion, the malignant esophago-pulmonary fistula should be considered in the differential diagnosis of a lung abscess which does not follow a typical course.

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