



Esophago-Pulmonary Fistula Caused by Lung Cancer Treated with a Covered Self-Expandable Metallic Stent

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Keywords

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A 71-year-old man was diagnosed with squamous cell lung cancer in the right lower lobe. He was treated with chemotherapy (first line: TS-1/CDDP; second line: carboplatin/nab-paclitaxel) and radiation therapy (41.4 Gy), but his disease continued to progress. The patient complained of relatively sudden-onset chest pain and high-grade fever. Computed tomography (CT) showed a small volume of air in the lung cancer of the right lower lobe, so the patient was suspected of fistula between the esophagus and the lung parenchyma. Upper gastrointestinal endoscopy revealed an esophageal fistula (Figure 1), which esophagography using water-soluble contrast medium showed overlying the right lower lobe

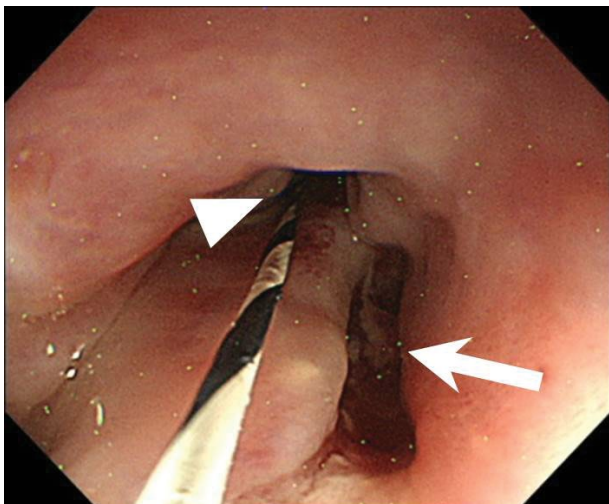


Figure 1: Endoscopy showing esophageal fistula (arrow). A guide wire was inserted into the esophageal lumen (arrow head).

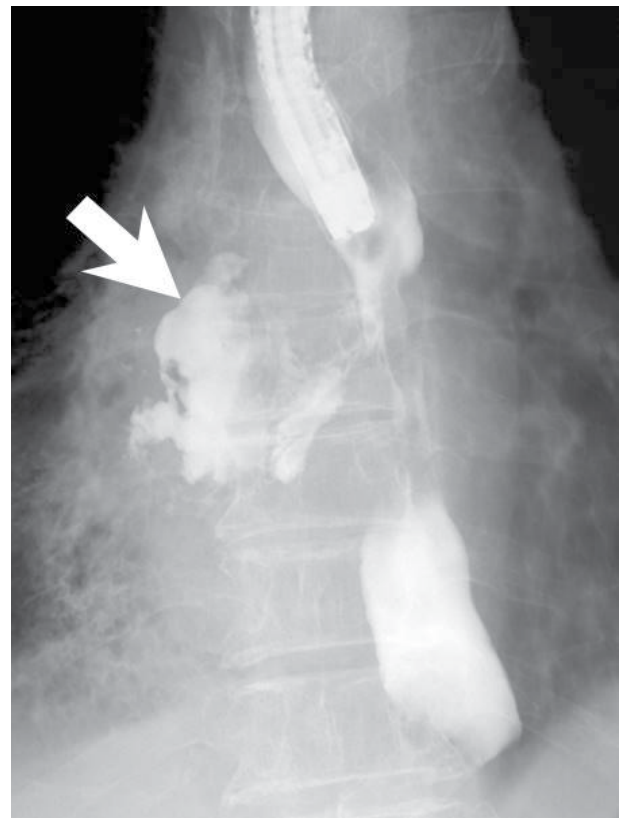


Figure 2: Esophagography findings. Contrast medium is shown overlying the right lower lobe (arrow).

(Figure 2). The distance from the incisor teeth to this fistula was 28 cm endoscopically. CT, which was done after esophagography, showed fistulous communication between the esophagus and the lung parenchyma of the right lower lobe (Figure 3). An esophageal covered self-expandable metallic stent (SEMS) was placed

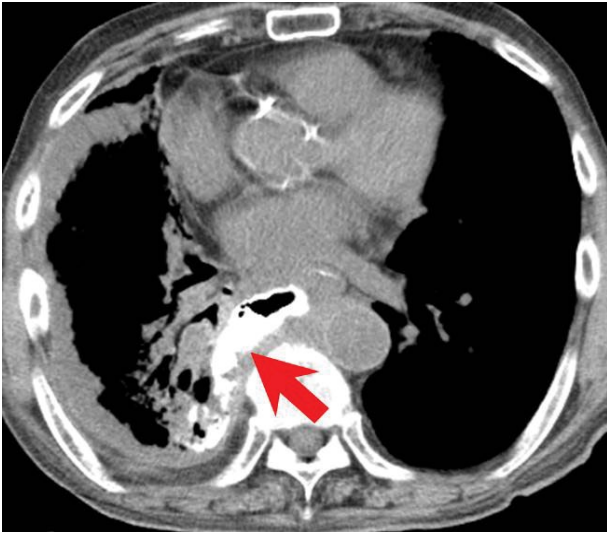


Figure 3: Computed tomography examination of the chest with oral contrast showed fistulous communication between the esophagus and the right lower lobe, with contrast pooling in a right lower lobe cavity (arrow).

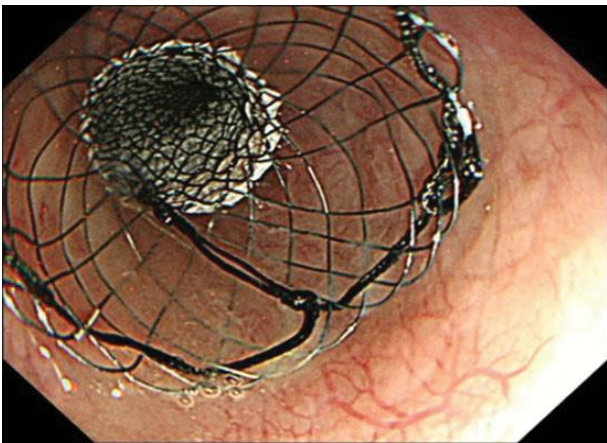


Figure 4: Endoscopic findings. A partially covered self-expandable metallic stent was placed in the esophagus to block the esophageal fistula.

for palliative treatment of the esophago-pulmonary fistula (Niti-S Esophageal Stent, Taewoong Medical, Seoul, Korea) (Figure 4). Diameter and length of cover stent was 18 mm and 10 cm. Esophagography performed both immediately after and 16 days after the stenting confirmed the disappearance of contrast medium leakage from the esophageal fistula to the lung parenchyma. Although the patient died 41 days after stenting due to lung cancer progression, he was able to eat and drink until the day before his death.

Acquired esophago-tracheal and esophago-bronchial fistulae, primarily caused by esophageal cancer, are well-known complications. However, an esophago-pulmonary fistula, especially one caused by lung cancer, is extremely rare [1-4].

In conclusion, a covered SEMS may be a palliative option in such cases and appears to improve the patient's quality of life.

Conflicts of Interest

Authors declare no conflicts of interest for this article.

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