

Benign Esophagorespiratory Fistula Complicated by Deep Impaction of Stent Mesh in the Esophageal Wall

The placement of self-expandable metallic stents is widely accepted as a treatment for malignant esophagorespiratory fistulas [1–2]. In contrast, there is ongoing discussion about the use of metallic stents for temporary treatment of benign and potentially reversible esophageal disorders, because after only a few weeks stent retrieval may already be difficult [2–4].

We report on a rare case in which the endoscopic removal of three metallic stents, which had been in situ for more than 3 years for benign esophagorespiratory fistula, was actually impossible due to deep impaction of the stent mesh into the esophageal wall, and subtotal esophageal resection was thus required.

In January 2001, a 73-year-old-man in a reduced physical condition (56 kg, 168 cm, BMI 19) presented with an express desire for treatment of a large esophagorespiratory fistula that had developed more than 3 years earlier, secondary to mediastinal hematoma and local inflammation after therapy with streptokinase for myocardial infarction (Figure 1). A total of three metallic stents (one Flamingo-Wallstent, one Ultraflex stent, one Gianturco-Z stent) had been placed in the esophagus to cover the fistula, with only temporary success, however, because of stent migration and dislocation. Since nutrition via a percutaneous endoscopic gastrostomy (PEG) had led to repeated aspiration, the patient had been fed exclusively by parenteral means for almost 3 years.

At admission in January 2001, endoscopy and bronchoscopy showed stents deeply embedded in the esophagus with several wires perforating into the trachea. Thus, endoscopic stent retrieval, even in a piecemeal fashion, was impossible.

Therefore, as a first operation transthoracic esophagectomy with cervical esophagostomy had to be performed to allow closure of the defect in the trachea (Figure

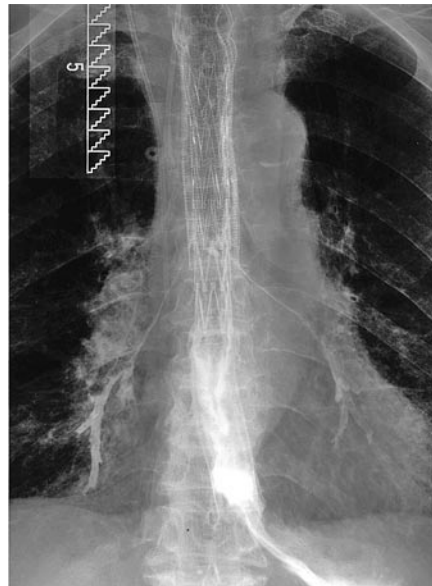


Figure 1 Contrast swallow with imaging of left and right bronchial tree indicating an esophagorespiratory fistula.

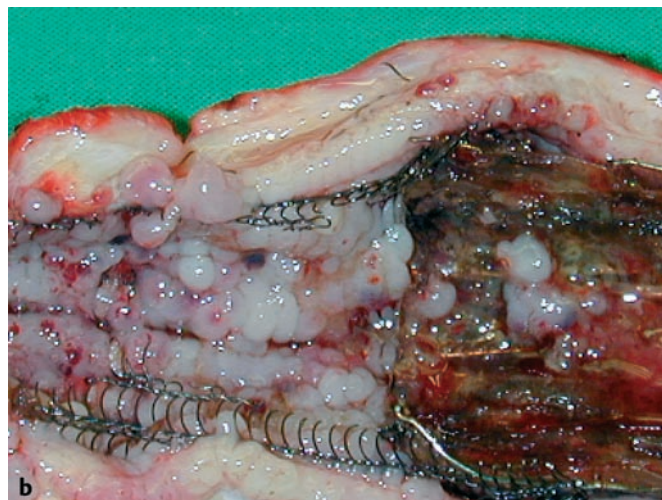
2a, b). During this operation, several wires had to be removed from of the trachea, lung and mediastinum. The postoperative course was complicated by recurrent pneumonias requiring mechanical ventilation for almost 3 months. At 1 year after esophagectomy, reconstruction was achieved with a cervical esophago-gastric anastomosis via the retrosternal route. The patient is now in good physical condition, at 2 years after this operation, and on completely enteral nutrition.

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Figure 2 a, b Resected esophagus with stents deeply embedded in the esophageal wall.



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