Use of Omental and Rectus Abdominis Muscular Flaps to Close an Esophago-Bronchial Fistula Developing for 8 Years

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A 56-year-old man who had undergone primary closure of the esophagus and left pleural drainage for a lower thoracic esophageal perforation caused by trauma 8 years earlier developed an esophago-bronchial fistula (fig. 1). We performed primary closure on both sides of the esophagus and lung using a stapler, and inserted omental and left rectus abdominis muscular flaps. Intra-thoracic chronic abscesses and chronic esophago-bronchial fistulae are very difficult to treat and recurrence is

frequently observed. Consequently, a high volume patch that acted as a strong defense against infection and isolated the esophagus from the bronchus (lung) was necessary in this case. The use of omental and rectus abdominis muscular flaps, instead of conventional fundic wrapping, completely isolated the lower esophagus from the bronchus (fig. 2). Twenty-one months after the surgery, the patient is well and without symptoms or recurrence.

Fig. 1. Esophagogram obtained at admission from a patient presenting with a severe cough. An esophago-bronchial fistula was revealed.

Fig. 2. Computed tomography showing the use of a pedicle omental flap (O) and a muscular flap from the left rectus abdominis muscle (M) to close an esophageal fistula. L = Sutured part of the lung site of the esophago-bronchial fistula; D = diaphragma sutured using stapler.