Resolution of a large infradiaphragmatic leak with endoscopic vacuum therapy after total gastrectomy

Anastomotic insufficiency with leakage is a life-threatening complication after radical gastrectomy. Surgical reintervention may be associated with high rates of recurrence and increased morbidity [1]. Placement of a fully covered self-expandable metal stent is commonly performed as a first line conservative treatment. However, success rates after endoscopic stenting range between 63% and 91% [2]. Endoscopic vacuum therapy is a novel technique that allows continuous drainage of the leak, control of infection, and secondary wound healing process, and has shown high clinical success rates [3–5].

A 35-year-old man who underwent total gastrectomy and termino-lateral esophagojejunal anastomosis for gastric cancer at an outside hospital presented with an anastomotic leakage 5 days after surgery. Re-operation was unsuccessful. On postoperative Day 10, the patient was referred to our center with septic shock. The computed tomography (CT) scan confirmed the persistence of an anastomotic leak (Fig. 1). An upper endoscopy showed a wall defect at the level of the anastomosis, which affected 30% of the circumference and gave access to a 10 cm (depth) × 5 cm (diameter) cavity with necrotic debris.

An Eso-SPONGE (B. Braun, Melsungen, Germany) was placed with endoscopic guidance inside the cavity and connected to a vacuum with a negative pressure of 100 mmHg (Video 1). The sponge was replaced 2–3 times per week (Fig. 2). The septic shock quickly resolved with antibiotic therapy, and after 36 days of endoscopic treatment and 12 sponge replacements, the remaining wound cavity was <2 cm (depth) × 1 cm (diameter) and the endoscopic therapy was discontinued. An upper endoscopy 10 days later (Fig. 3), and a CT scan and a barium swallow confirmed absence of leakage (Fig. 4, Fig. 5). The patient was discharged 2 days later with good tolerance to an oral diet, and continued to do well at 3 months’ follow-up.

Endoscopy_UCTN_Code_CPL_1AH_2AG

Acknowledgments

We thank Dr. Mario Pagés for his expertise and advice in selecting the radiologic pictures, and Dr. Andrés Cárdenas for proofreading and editing the text.

Competing interests

Drs. Sendino, Momblan, and de Lacy are speakers for B. Braun Company.
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References


Bibliography

DOI https://doi.org/10.1055/a-0929-5508
Published online: 2019
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Sendino Oriol et al. Resolution of infradiaphragmatic with EVT... Endoscopy