Pericarditis: a rare complication of fully covered self-expandable metallic stent in postoperative benign anastomotic stricture

Fig. 1 Endoscopic view showing a marked stricture at the anastomotic site of esophagojejunostomy.

Fig. 2 Endoscopic view showing a fully covered, self-expandable, metallic stent placed at the anastomotic site of esophagojejunostomy.

Benign esophageal strictures are traditionally treated by endoscopic dilation with bougies or balloons [1,2]. Fully covered, self-expandable, metallic stents (SEMS) have been used in the treatment of benign esophageal disease, with the benefits of removability and low incidence of tissue hyperplasia [3]. However, significant complications, such as stent migration, recurrent stricture, or erosions into vital structures may occur [4,5]. We report on a novel case of pericarditis in a patient with recurrent postoperative benign anastomotic stricture, which was managed by placement of a fully covered SEMS.

A 71-year-old man presented at the emergency department with dyspnea and acute chest pain 3 months after endoscopic placement of a fully covered SEMS.

Fig. 3 Complete electrocardiography showed ST elevation in multiple leads.

Fig. 4 Abdominal computed tomography. **a** Coronal section showing a 3-cm, self-expandable, metallic stent (SEMS; short arrow) at the anastomotic site of esophagojejunostomy. **b** Transverse section showing moderate pericardial effusion (long arrow). Note the adjacent proximal end of the SEMS in the esophagus.

He had undergone total gastrectomy with esophagojejunostomy 2 years earlier for gastric cancer. Upper endoscopy 6 months

before the current admission showed a marked stricture at the anastomotic site of esophagojejunostomy (● **Fig. 1**). Recur-

rent strictures occurred even with repeated endoscopic dilation with bougie during the subsequent 3 months. A fully covered SEMS (Niti-S Comvi stent; Taewoong Medical, Seoul, Korea), 1 cm in diameter and 3 cm in length, was placed for the management of the recurrent benign anastomotic stricture (● Fig. 2). He presented at the emergency department 3 months later with chest pain and dyspnea.

Complete electrocardiography (ECG) showed ST elevation in multiple leads (● Fig. 3). Coronary angiography revealed no significant findings for coronary artery disease. Abdominal computed tomography with enhancement revealed a moderate amount of pericardial effusion (● Fig. 4a, b). Emergency pericardiocentesis was performed due to a clinical diagnosis of pericarditis.

Culture of the pericardial effusion yielded positive result for *Staphylococcus aureus*. The fully covered SEMS was then removed endoscopically and pericarditis improved with antibiotic use for 21 days. Complete ECG at follow-up showed recovery to a normal sinus rhythm.

Endoscopy_UCTN_Code_CPL_1AH_2AD

Competing interests: None

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DOI <http://dx.doi.org/10.1055/s-0034-1377494>
Endoscopy 2014; 46: E453–E454
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

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