

Gastropleural fistula: a complication of esophageal self-expanding metallic stent migration

A 68-year-old woman presented with dysphagia secondary to squamous cell carcinoma of the esophagus. A self-expanding metallic stent (SEMS) was inserted for symptomatic relief (▶ Fig. 1) and neoadjuvant chemoradiotherapy was commenced. Treatment was suspended after only one cycle as the patient developed necrotizing fasciitis of her right buttock and thigh following an intramuscular injection. She declined further neoadjuvant therapy or surgery.

Endoscopy and computed tomography (▶ Fig. 2) at 6 months showed a complete luminal response and distal migration of the SEMS into the stomach. Multiple attempts to remove the SEMS endoscopically failed and open retrieval was planned. Before this could be undertaken, the patient presented with epigastric and left-sided chest pain, dyspnea, and sepsis. Plain chest radiographs demonstrated a large, multiloculated left pleural effusion. The SEMS was visible lying vertically within the stomach (▶ Fig. 3). The patient deteriorated rapidly, developing multiorgan failure, and died. Autopsy confirmed that death was due to sepsis secondary to a left-sided empyema due to perforation of the fundus of the stomach and diaphragm by the SEMS, forming a gastropleural fistula. There was no residual carcinoma and there were no metastases.

Gastropleural fistula following placement of a SEMS has not been previously described. SEMS migration is common, however, and may occur following down-staging of esophageal carcinoma with chemoradiotherapy [1]. Management of SEMS migration by endoscopic reintervention is effective [2] but, as in our case, not always possible. A conservative approach is also widely reported, and migrated stents may remain in the stomach or pass spontaneously per rectum without complication [3].

Our patient had a complete pathological response to half the prescribed dose of chemoradiotherapy and thus had a good prognosis [4], but died as a result of a complication of a SEMS. We advocate early removal of migrated SEMS, especially in patients with a longer life expectancy.

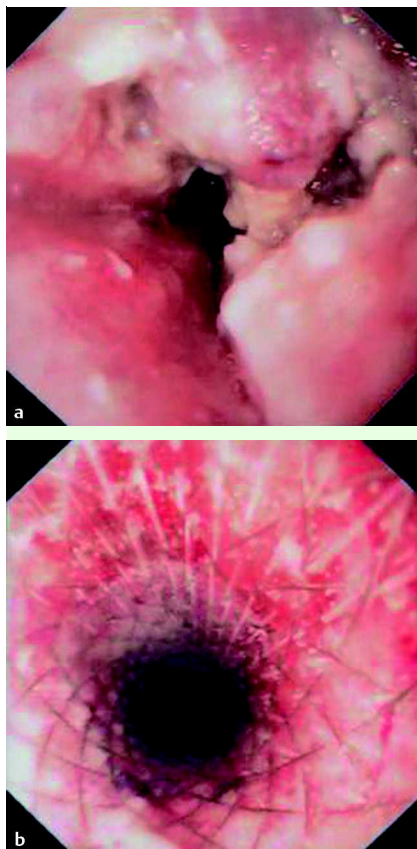


Fig. 1 a Endoscopic view of esophageal tumor compromising the lumen. b Endoscopic view of patent lumen after placement of a self-expanding metallic stent.

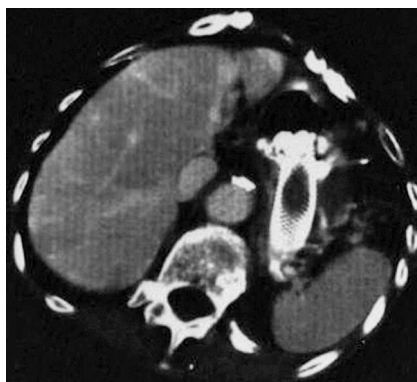


Fig. 2 Restaging computed tomographic scan of the abdomen showing a migrated esophageal self-expanding metallic stent in the stomach.

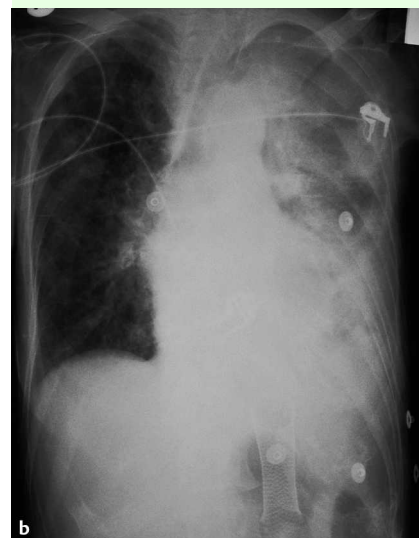


Fig. 3 a Erect chest radiograph showing a large, multiloculated left pleural effusion. b Supine chest radiograph showing the self-expanding metallic stent.

Endoscopy_UCTN_Code_CPL_1AH_2AD

H. Furlong, A. Nasr, T. N. Walsh

Department of Surgery, Connolly Hospital, Blanchardstown, Dublin, Ireland

References

- 1 *Thuraisingam AI, Hughes ML, Smart HL.* Down-staging of an advanced esophageal carcinoma with chemoradiotherapy leading to stent migration necessitating colectomy. *Gastrointest Endosc* 2004; 59: 457–460
- 2 *Homs MY, Steyerberg EW, Kuipers EJ et al.* Causes and treatment of recurrent dysphagia after self-expanding metal stent placement for palliation of esophageal carcinoma. *Endoscopy* 2004; 36: 880–886
- 3 *De Palma GD, Iovino P, Catanzano C.* Distally migrated esophageal self-expanding metal stents: Wait and see or remove? *Gastrointest Endosc* 2001; 53: 96–98
- 4 *Forastiere AA, Orringer MB, Perez-Tamayo C et al.* Preoperative chemoradiation followed by transhiatal esophagectomy for carcinoma of the esophagus: final report. *J Clin Oncol* 1993; 11: 1118–1123

Bibliography

DOI 10.1055/s-0028-1103456
Endoscopy 2009; 41: E38–E39
© Georg Thieme Verlag KG Stuttgart · New York ·
ISSN 0013-726X

Corresponding author

T. N. Walsh, MD, FRCSI
Department of Surgery
Connolly Hospital
Blanchardstown
Dublin 15
Ireland
Fax: +353-1-8202284
twalsh@rcsi.ie