

## Esophageal self-expanding metallic stent (SEMS) migration: it's a topsy-turvy world

A 47-year-old woman underwent endoscopic treatment of a fistula following sleeve gastrectomy, performed 3 weeks earlier. A partially covered self-expandable metallic stent (SEMS) was inserted (15 cm, 18–23 mm Ultraflex, Boston Scientific, Natick, Massachusetts, USA). At 1 month follow-up she was symptom-free. Radiographic examination and computed tomography (Fig. 1) showed that the stent had partially migrated distally, and there was no collection. The patient became aphagic 6 days before her scheduled admission for retrieval of the partially covered SEMS. Endoscopy revealed that the stent had bent and “re-migrated” proximally, into the mid-esophagus, thus causing complete obstruction (Fig. 2). The stent was retrieved using rat-tooth forceps, and the patient was discharged the next day. She remains symptom-free. Leaks complicate bariatric surgery in 2.4%–4.9% of cases [1–3]. Endoscopic placement of self-expandable stents is a well-recognized part of leak management and leads to successful closure in 87.7% [4]. Among the most frequent complications of SEMS insertion is stent migration (11.1%) and stenosis caused by hyperplasia (11.1%) [5]. This rate of migration is related to the design of the stents, which is based on their use in stricture management. In the absence of stenosis, the incomplete contact between the mucosa and the stent may lead to migration. Hyperplasia following insertion of partially covered SEMS helps to decrease the risk of migration [4].

In the present case, we found a stent folded onto itself in the esophagus, and radiographs showed that the upper part of the stent was located distally. We speculate that after the stent migrated into the gastric sleeve (Fig. 3), it was partially repositioned nearly horizontally, after which it folded onto itself and migrated proximally into the esophagus, where it caused complete obstruction. This may be explained by narrowing of the gastric body following the sleeve, which could hinder distal migration in the antrum.

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**Competing interests:** None



**Fig. 1** Radiograph (a) and computed tomography (CT) scan (b) showing a stent partially migrated distally in a 47-year-old woman with aphagia following endoscopic treatment of a fistula.

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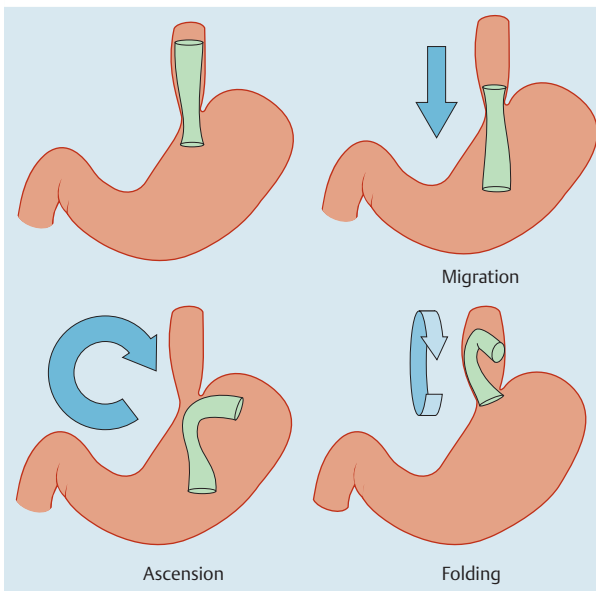
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**Fig. 2** The folded over stent in the esophagus: **a** endoscopic view and **b** fluoroscopic view.



**Fig. 3** Suggested mechanism for the proximal migration of the stent.

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