Extraluminal migration of an esophageal metal stent causing splenic injury

A 47-year-old woman developed a large area of anastomotic dehiscence (Fig. 1 a) 3 months after sleeve gastrectomy for obesity. A 15-cm fully covered self-expanding metal stent (SEMS) was deployed to cover the anastomotic leak, as a bridge to surgery. This was anchored to the esophageal wall by endosuture (Fig. 1 b). The patient presented again 6 weeks later with distal SEMS migration through the gastric defect into the splenic parenchyma (Fig. 2), causing splenic laceration and hematoma.

There was active extravasation of contrast at the distal end of the stent while the proximal end remained within the stomach. She underwent urgent embolization of the left gastric, splenic, and left inferior phrenic arteries, followed by total splenectomy and Roux-en-Y gastrojejunostomy.

Stent migration within the gastrointestinal tract is a recognized complication of esophageal stent insertion, with overall migration rates ranging from 2% to 8% [1]. However, complications of distal esophageal stent migration such as bowel obstruction and perforation are uncommon. To our knowledge, extraluminal migration of an esophageal SEMS into the spleen has not previously been reported.

Fig. 1 Endoscopic views of esophagus showing: a large areas of anastomotic dehiscence following sleeve gastrectomy surgery; b fully covered self-expanding metal stent (SEMS) anchored to the esophageal wall by endosuture.

Fig. 2 Computed tomography showing distal self-expanding metal stent (SEMS) migration through gastric defect into the splenic parenchyma: a, b sagittal reconstructions; c, d axial reconstructions.