The use of stand-alone fully covered self-expandable metallic stents for drainage of walled-off necrosis or pseudocyst may lead to poor results

In current practice, endoscopic transmural drainage is the preferred method for the treatment of symptomatic walled-off necrosis and pseudocysts in patients with acute pancreatitis [1]. In order to maintain a fistulous tract between these lesions and the gut lumen, fully covered self-expandable metallic stents (FCSEMS) and/or plastic pigtail stents can be used. The migration of FCSEMS to the gut lumen can lead to the disconnection of the cavity from the gut lumen, abscess development in the cavity, and life-threatening septic complications.

We present the case of a 20-year-old man with acute biliary pancreatitis who was admitted to our hospital with abdominal pain, early satiety, nausea, and vomiting. Endoscopic ultrasound and computed tomography scans demonstrated a pseudocyst (diameter 71 × 126 mm) in the tail of the pancreas. The gastric corpus was compressed by the cyst (Fig. 1). Endoscopic drainage was planned. Cystogastrostomy was performed and an FCSEMS (Micro-Tech, 16 × 30 mm; Nanjing, Jiangsu Province, China) was placed into the fistulous tract (Fig. 2). After the procedure, the patient’s symptoms improved. However, he developed fever, leukocytosis, and progressive abdominal pain on the third postoperative day. On plain abdominal radiography, the metal stent was seen to be located in the rectum (Fig. 3). Endoscopy was performed and large amounts of pus was observed coming from the orifice of the cystogastrostomy into the gastric lumen. A nasocystic drainage catheter was placed into the cyst cavity via the same orifice. The patient expelled the stent on defecation the same day.

Fever and leukocytosis resolved following nasocystic drainage and broad-spectrum antibiotic therapy. The nasocystic drainage catheter was then exchanged for two 10-Fr double-pigtail plastic stents, and the patient was discharged.

There are several well-known complications related to the metal stents used in cystogastrostomy. Migration is one of them and can occur either into the cystic cavity or into the gut lumen [2]. It is important to fix FCSEMS in place using a double-pigtail stent (stent-in-stent arrangement) or by the addition of a nasocystic drainage catheter in order to prevent migration and related complications.

Competing interests: None