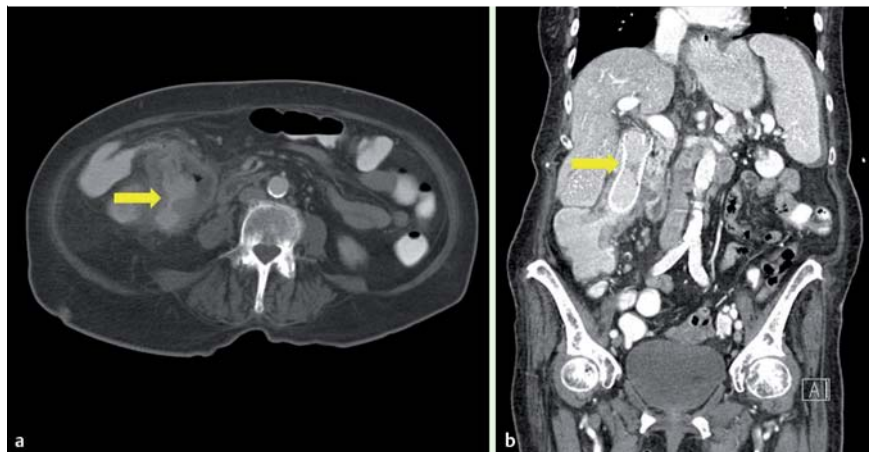


## Fistulization of self-expanding metal stent from right colon into duodenum

Colonic obstruction has been reported in 7%–29% of patients with colorectal cancer. Endoscopic placement of a self-expandable metal stent (SEMS) to relieve obstruction is often used for palliation or as a “bridge” to elective surgery [1]. We describe a unique complication of colonic SEMS placement.

An 87-year-old woman presented with anemia, weight loss, and fatigue. She underwent a colonoscopy which revealed a partially obstructing mass at the hepatic flexure; biopsies confirmed adenocarcinoma. CT scan of the abdomen confirmed an “apple core” lesion with no evidence of perforation. The patient underwent placement of a 22×120mm colonic SEMS (WallFlex®; Boston Scientific, Natick, Mass., USA) without difficulty. Following stent placement she experienced clinical deterioration and increasing diarrhea. Further review of the CT revealed the possibility of duodenal invasion from the hepatic flexure mass (▶ Fig. 1a). An upper endoscopy was performed which revealed fistulization of the colonic SEMS through the hepatic flexure into the second portion of the duodenum. The endoscope was able to transit the fistula through the stent from the duodenum and enter the colon (▶ Video 1). A CT scan of the abdomen performed following the endoscopy confirmed that the colonic stent extended to the second portion of the duodenum with no evidence of free air (▶ Fig. 1b). Surgical options were considered, but due to the patient’s deteriorating functional status a palliative approach was chosen.

SEMS are used in the symptomatic management of colonic obstruction. While success rates are high, complications include perforation, migration, and procedure-related mortality [2–4]. Migration of biliary stents resulting in colovaginal fistula has been reported [5]. This is the first report to our knowledge of a colonic



**Fig. 1** a Computed tomography (CT) scan showing “apple core” lesion at the hepatic flexure, adjacent to and invading the duodenum. b Coronal CT scan showing colonic self-expanding metal stent extending from right colon into duodenum.

SEMS fistulizing from the right colon into the duodenum. In patients with new symptoms or clinical deterioration after stent placement, the possibility of stent migration or fistulization should be considered.

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### Video 1

Endoscopy from the duodenum via the self-expanding metal stent into the transverse colon.