

Acute pancreatitis induced by placement of a duodenal stent

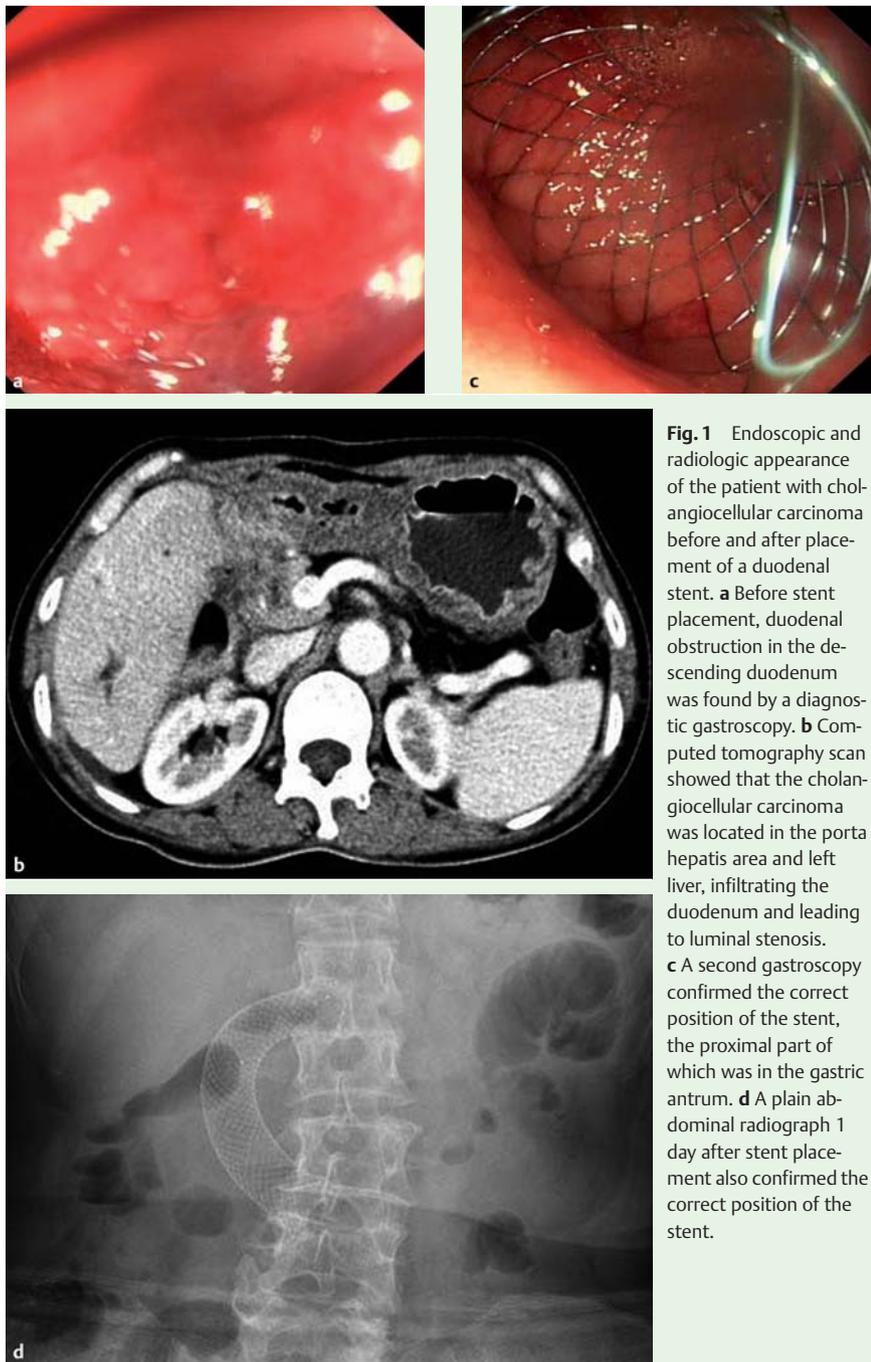


Fig. 1 Endoscopic and radiologic appearance of the patient with cholangiocellular carcinoma before and after placement of a duodenal stent. **a** Before stent placement, duodenal obstruction in the descending duodenum was found by a diagnostic gastroscopy. **b** Computed tomography scan showed that the cholangiocellular carcinoma was located in the porta hepatis area and left liver, infiltrating the duodenum and leading to luminal stenosis. **c** A second gastroscopy confirmed the correct position of the stent, the proximal part of which was in the gastric antrum. **d** A plain abdominal radiograph 1 day after stent placement also confirmed the correct position of the stent.

Placement of metal stents is an effective therapy for patients with duodenal obstruction. Compared with palliative surgical treatment, it yields higher clinical success rates and shorter hospital stays [1,2]. Acute pancreatitis following this therapy has been reported only rarely. We report a case of acute pancreatitis following placement of a duodenal metal stent.

A 59-year-old Chinese woman was admitted to our hospital on 2 April 2013 with a history of cholangiocellular carcinoma in the porta hepatis area. She had been suffering from aphagosis and vomiting for 2 weeks. The diagnostic gastroscopy revealed duodenal obstruction in the descending duodenum (Fig. 1a). A computed tomography (CT) scan showed

an obscure boundary mass in the porta hepatis area, infiltrating the duodenum (Fig. 1b). Placement of a metal duodenal stent was performed successfully. After the endoscopic therapy, the patient kept complaining of upper abdominal pain. At first, this symptom was attributed to possible stent compression. One day later, the pain had not reduced and vomiting re-started. A second gastroscopy (Fig. 1c) and a plain abdominal radiograph (Fig. 1d) showed that the stent had not moved. Meanwhile, blood tests showed an elevated amylase of 1010U/L, which strongly indicated the development of acute pancreatitis. After 3 days of therapy involving absolute zero diet (i.e. no food or drink permitted), omeprazole, octreotide, and fluid infusion, the patient's symptoms of upper abdominal pain and vomiting resolved. The patient was thus diagnosed with acute pancreatitis caused by duodenal stent placement.

Compression of the duodenal papilla by the stent can lead to increased pressure in the pancreatic duct, which results in acute pancreatitis. A stent bridging the duodenal papilla is a significant predictor for the development of acute pancreatitis [3]. Due to the lack of specific symptoms or the inexperience of gastrointestinal physicians, acute pancreatitis following duodenal stent placement is easy to misdiagnose.

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Competing interests: None

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