

Cholangitis secondary to afferent loop syndrome from a gastric stump adenocarcinoma

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CASE REPORT

An 85-year-old patient who had undergone a subtotal gastrectomy and Billroth-II reconstruction for ulcer disease 40 years ago was admitted due to abdominal pain and jaundice. The laboratory parameters were as follows: total bilirubin: 2.1 mg/dl, NR: 0-1.3 mg/dl; direct bilirubin: 1.5 mg/dl, NR: 0-0.3 mg/dl; and alkaline phosphatase: 2.369 IU/l, NR: 91-240 IU/l. An ultrasound scan revealed a dilated biliary tree with echogenic material inside. The afferent loop could not be reached via endoscopic retrograde cholangiopancreatography (ERCP) due to a neof ormation at the gastric stump; biopsies confirmed an intestinal type adenocarcinoma. Magnetic resonance cholangiography (Fig. 1) identified an ulcerated growth on the gastric remnant with secondary afferent loop dilation and bile duct dilation. The patient was



Fig. 1. MR-cholangiogram: a dilated biliary tree secondary to afferent loop syndrome due to a gastric stump neoplasm.

managed surgically with a total gastrectomy and Roux-en-Y reconstruction and had a favorable outcome.

DISCUSSION

Afferent loop syndrome is a complication of a partial gastrectomy with Billroth-II gastrojejunostomy or cephalic duodenopancreatectomy, with an incidence of 0.2-20.0% (1). It may arise from adhesions, loop angulation, anastomotic strictures, internal herniation or tumor relapse (2). Biliary and pancreatic secretions accumulate in the afferent loop, which results in distension and may lead to necrosis and perforation. In our case, high pressure in the afferent loop resulted in a secretion reflux into the biliary tree which induced secondary cholangitis. As a neoplastic obstruction was the primary cause, surgical treatment was performed. Cases managed endoscopically have been reported, with

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the production of gastrojejunal fistulae using lumen-apposing stents which may play a greater role in poor surgical candidates in the future (3).

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