Endoscopic ultrasound-directed transgastric ERCP facilitating extensive ampullectomy in Roux-en-Y gastric bypass patient

A 71-year-old woman with a history of BRCA2+ovarian cancer and Roux-en-Y gastric bypass was incidentally found to have transiently elevated cholestatic liver function tests. Magnetic resonance cholangiopancreatography (MRCP) demonstrated intra- and extrahepatic dilatation to the level of the pancreatic head but no apparent stone or mass. A contrast-enhanced abdominal computed tomography (CT) scan identified a 26-mm ampullary neoplasm (Fig. 1). When reviewed in retrospect, the lesion was present on her positron emission tomography (PET) scan 3 years ago with a mild increase in size.

BRCA2 mutation carriers are intrinsically at risk for malignancies, pancreatic among them [1]. Furthermore, ampullary lesions exceeding 15 mm carry a specificity of 80% for underlying malignancy [2]. Possible therapeutic strategies were reviewed considering various factors including altered anatomy. The Whipple procedure involved a risk for postoperative fistulae given her CT findings of fatty pancreas; she was also a poor surgical candidate. Percutaneous gastrostomy or laparoscopy-assisted endoscopic retrograde cholangiopancreatography (ERCP) would be technically challenging with ampullectomy intended. A multidisciplinary majority decision favored a complete endoscopic approach employing endoscopic ultrasound (EUS)-directed transgastric ERCP, typically a two-step technique including placement of a lumen-apposing metal stent (LAMS) reconnecting the stomach through temporary gastrogastrostomy with subsequent ERCP after tract maturation. If
waiting is not an option, the procedure can be also done in a single session [3].
The technique carries a risk of weight gain by essentially reversing the bypass.
However, supporting evidence is lacking, and any weight gain before fistula closure
would likely be outweighed by the benefit of the procedure [4–5].
EUS-guided gastrogastrostomy was performed uneventfully (Fig. 2) (Video 1).
After tract maturation, ERCP was performed with a near-complete resection of
a 40-mm ampullary mass using hot snare polypectomy (Fig. 3, Fig. 4). A small residuum remained and was removed in 4 weeks (Fig. 5).
Histopathology showed ampullary adenoma negative for high grade dysplasia or invasion, and the patient was scheduled for endoscopic follow-up with LAMS extraction and fistula closure in 2 months.

Endoscopy_UCTN_Code_TTT_1AR_2AF

Competing interests

M. L. Freeman is a consultant for Boston Scientific. The other authors declare they have no conflict of interest.

The authors

Petr Vaněk1,2, Martin L. Freeman1, Guru Trikudanathan1

1 Division of Gastroenterology, Hepatology and Nutrition, University of Minnesota, Minneapolis, MN, USA
2 2nd Department of Internal Medicine, Palacky University Olomouc and University Hospital Olomouc, Olomouc, Czech Republic

Corresponding author

Guru Trikudanathan, MD
Division of Gastroenterology, Hepatology and Nutrition, 420 Delaware Street SE, MMC 36, Minneapolis, MN 55455, USA
Fax: +1-612-625-5620
triku001@umn.edu

References


Bibliography

Endoscopy 2021; 53: E261–E262
DOI 10.1055/a-1252-2561
ISSN 0013-726X
published online 1.10.2020
© 2020. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany