Afferent loop syndrome treated by endoscopic ultrasound-guided gastrojejunostomy, using a lumen-apposing metal stent with an electrocautery-enhanced delivery system

Afferent loop syndrome is a complication that infrequently occurs after pancreatocoduodenectomy [1]. Complete obstruction occurs which leads to cholangitis, pancreatitis, perforation, and necrosis. In particular, patients with cancer recurrence cannot continue chemotherapy treatment, become debilitated, and may eventually die. Therefore, early and appropriate decompression treatment is needed.

This report describes endoscopic ultrasound (EUS)-guided gastrojejunostomy for treatment of afferent loop syndrome, using a lumen-apposing metal stent (LAMS) incorporated into an electrocautery-enhanced delivery system.

A 44-year-old man was admitted to our hospital with vomiting and abdominal pain; he had undergone pancreatoduodenostomy for pancreatic head cancer 11 months earlier. Computed tomography (CT) revealed dilation of the afferent loop associated with a recurrence of cancer (▶Fig. 1). First, multiple plastic stents were inserted by balloon-assisted enteroscopy (▶Fig. 2) and his clinical condition improved. However, 1 month later he was admitted again with abdominal pain because of stent occlusion. CT revealed dilation of the afferent loop and intrahepatic bile duct (▶Fig. 3). We performed EUS-guided gastrojejunostomy with a LAMS incorporated into an electrocautery-enhanced delivery system (Hot AXIOS; Boston Scientific, Natick, Massachusetts, USA) (▶Fig. 4, ▶Video 1). CT on the following day showed improvement in the dilation of the afferent loop (▶Fig. 5). The patient showed resolution of clinical symptoms and received outpatient chemotherapy.

A previous report has demonstrated the usefulness of LAMS for transenteric drainage of pancreatic pseudocysts and the gallbladder [2]. Recently, EUS-guided transgastric access into the afferent limb with LAMS has been reported [3, 4]. The use of the Hot AXIOS system has some advantages compared with conventional LAMS, namely, avoidance of the need to exchange devices for stent placement, shortening of procedure time, prevention of leakage in the abdominal cavity, and prevention of separation of the digestive wall and afferent loop tract wall during the procedure. Therefore, EUS-guided drainage with LAMS is a safe, easy-to-perform, and highly effective minimally invasive treatment modality for afferent loop syndrome.

Endoscopy_UCTN_Code_TTT_1AR_2AD

▶ Video 1 Endoscopic ultrasound-guided gastrojejunostomy, using a lumen-apposing metal stent with an electrocautery-enhanced delivery system, for treatment of afferent loop syndrome.

▶ Fig. 1 Computed tomography (CT) revealed dilation of the afferent loop associated with a recurrence of cancer, in a 44-year-old man who had undergone pancreatoduodenostomy for pancreatic head cancer 11 months previously.
Multiple plastic stents were inserted by balloon-assisted enteroscopy.

CT revealed dilation of the afferent loop and intrahepatic bile duct.

Endoscopic ultrasound (EUS)-guided gastrojejunostomy was performed.

CT on postoperative day 1 showed improvement in the dilation of the afferent loop.

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Competing interests
None

The Authors
Kenjiro Yamamoto1, Takayoshi Tsuchiya1, Reina Tanaka1, Honjo Mitsuyoshi1, Shuntaro Mukai1, Yuichi Nagakawa2, Takao Itoi1
1 Department of Gastroenterology and Hepatology, Tokyo Medical University, Tokyo, Japan
2 Third Department of Surgery, Tokyo Medical University, Tokyo, Japan

Corresponding author
Takao Itoi, MD, PhD
Department of Gastroenterology and Hepatology, Tokyo Medical University, 6-7-1 Nishishinjuku, Shinjuku-ku, Tokyo 160-0023, Japan
Fax: +81-3-53816654
itoi@tokyo-med.ac.jp
References


Bibliography
DOI https://doi.org/10.1055/s-0043-115893
Published online: 10.8.2017
Endoscopy 2017; 49: E270–E272
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at
https://mc.manuscriptcentral.com/e-videos