

Successful removal of a buried lumen-apposing metal stent without complications using pancreatic drainage and a hemostatic agent

Yuki Fujii, Kazuyuki Matsumoto, Motoyuki Otsuka

Department of Gastroenterology and Hepatology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Science, Okayama, Japan

Lumen-apposing metal stents (LAMS) are effective for cystic drainage.¹ Buried LAMS syndrome, wherein the LAMS is embedded in overgrowing mucosa, is a rare adverse event.^{2,3} A 46-year-old man with alcohol-induced chronic pancreatitis presented to another hospital for jaundice. Computed tomography (CT) revealed a biliary stricture due to compression of the pancreatic head by a pseudocyst (Fig. 1A). A 15-mm LAMS (Axios; Boston Scientific Co.) was placed via the stomach (Fig. 1B). Nine weeks later, acute pancreatitis developed, and CT revealed a buried LAMS caused by inflammation-induced pancreatic head swelling, with stricture and disruption of the pancreatic duct around the LAMS (Fig. 1C). It could not be removed and duodenal edematous stenosis prevented transpapillary pancreatic duct drainage. The patient was transferred to our hospital for endoscopic ultrasonography-guided drainage of the pancreatic duct. The pancreatic duct was punctured using a 22-gauge needle, and pancreatography revealed stricture and disruption of the duct at the pancreatic head (Fig. 2A). A 7-Fr 15 cm pancreatic stent was placed through the stricture after fistula dilation, and simultaneous LAMS removal was attempted using a

direct-viewing endoscope. The fistula entrance was identified in the posterior wall of the gastric antrum (Fig. 2B) and dilated using a 15 mm balloon (Fig. 2C). The LAMS could not be removed by grasping the flange using forceps under fluoroscopic guidance. Therefore, the endoscope was inserted into the fistula lumen to confirm that the LAMS was embedded in the granulation tissue (Fig. 2D). We directly confirmed and grasped the inner portion of the LAMS with forceps, which was then safely

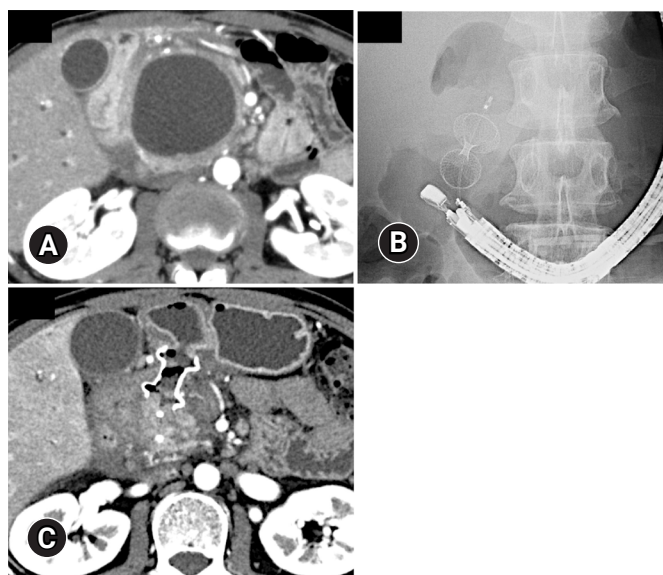


Fig. 1. (A) Computed tomography (CT) showing biliary stricture due to compression of the pancreatic head by a pseudocyst. (B) A lumen-apposing metal stent (LAMS) was placed endoscopically for the pseudocyst in the pancreatic head via the stomach. (C) CT image showing pancreatic head swelling due to pancreatitis, leading to the buried LAMS.

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Correspondence: Kazuyuki Matsumoto

Department of Gastroenterology and Hepatology, Okayama University Hospital, 2-5-1, Shikata-cho, Kita-ku, Okayama-city, Okayama 700-8558, Japan

E-mail: matsumoto.k@okayama-u.ac.jp

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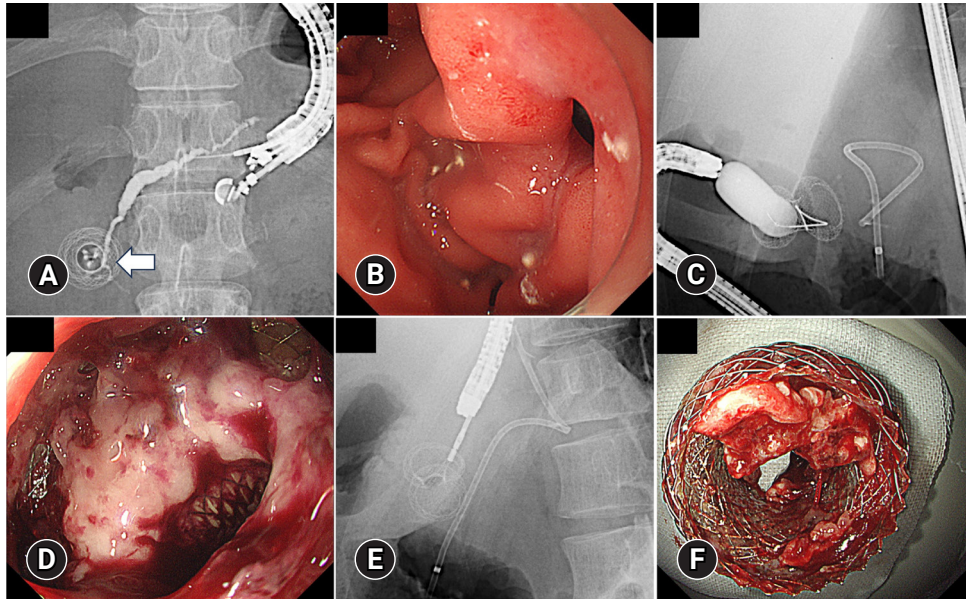


Fig. 2. (A) After 22-gauge needle puncture, pancreatography showed stricture and disruption (arrow) of the pancreatic duct at the pancreatic head. (B) The fistula entrance was identified in the posterior wall of the gastric antrum. (C) The fistula entrance was dilated using a balloon catheter. (D) The endoscope was inserted into the fistula lumen, confirming that the lumen-apposing metal stent (LAMS) was embedded in granulation tissue. (E, F) By grasping the inner portion of the LAMS with forceps and applying firm traction using the endoscope, the LAMS was successfully removed.

removed by applying firm traction using an endoscope (Fig. 2E, F). After LAMS removal, oozing was confirmed in the fistula lumen and hemostasis was achieved by applying a hemostatic agent (Purastat; 3-D Matrix Europe SAS). The patient was discharged without complications (Video 1).

Video

Video 1. Successful endoscopic removal of a buried lumen-apposing metal stent after cyst gastrostomy.

A video related to this article can be found online at <https://doi.org/ce.2024.233>.

Conflicts of Interest

The authors have no potential conflicts of interest.

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ORCID

Yuki Fujii <https://orcid.org/0000-0002-4231-9955>
 Kazuyuki Matsumoto <https://orcid.org/0000-0002-5102-7452>
 Motoyuki Otsuka <https://orcid.org/0000-0003-2869-2881>

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