

Antegrade stent deployment using a novel, covered metal stent through EUS-guided hepaticogastrostomy (with video)

Takeshi Ogura, Nobu Nishioka, Kazuhide Higuchi

2nd Department of Internal Medicine, Osaka Medical College, Osaka, Japan

Antegrade stent deployment combined with EUS-guided hepaticogastrostomy (HGS) reportedly produces longer stent patency and prevents adverse events following biliary stent placement.^[1,2] In this procedure, uncovered metal stents are usually used as the antegrade stent to prevent stent dislocation. Recently, a novel, covered, self-expandable metal stent (FCSEMS) has become available in Japan (HIRZO STENT, BCM Co., Ltd, Gyeonggi-do, South Korea) [Figure 1]. This stent delivery system is available in an 8 Fr size and has a tapered tip. The diameter of the flanges is 14 mm and that of the body is 10 mm. The large flanges of this stent, compared with conventional FCSEMS, prevent stent migration and dislocation. We, herein, report the technique for performing EUS-HGS combined with antegrade stent deployment using this novel FCSEMS.

The intrahepatic bile duct was punctured using a 19-gauge needle (Sono Tip Pro Control 19G; Medi-Globe GmbH, Rosenheim, Germany). Then, contrast medium was injected. A 0.025-inch guidewire (VisiGlide; Olympus

Medical Systems, Tokyo, Japan) was inserted into the biliary tract. Then, an ERCP catheter (MTW Endoskopie, Düsseldorf, Germany) was inserted, and the contrast medium was injected again to evaluate the stricture site. The guidewire was advanced

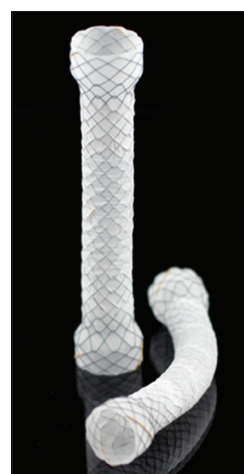


Figure 1. A novel, self-expandable, fully covered metal stent (HIRZO STENT, BCM Co., Ltd, Gyeonggi-do, South Korea)

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Address for correspondence

Dr. Takeshi Ogura, 2nd Department of Internal Medicine, Osaka Medical College, 2-7 Daigakuchou, Takatsukishi, Osaka 569-8686, Japan. E-mail: oguratakeshi0411@yahoo.co.jp

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Figure 2. Lower bile duct obstruction is seen under EUS-guided cholangiography imaging



Figure 3. The stent delivery system is inserted into the bile duct across the stricture site



Figure 4. Antegrade stent deployment is successfully performed

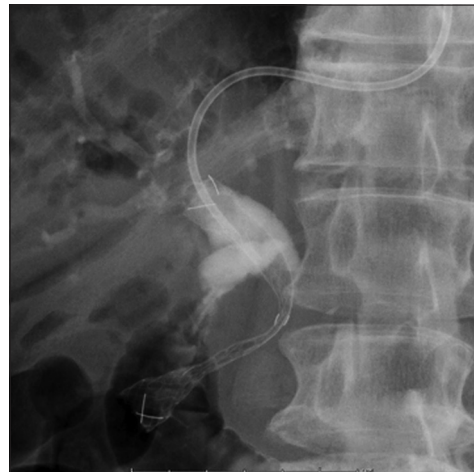


Figure 5. EUS-guided hepaticogastrostomy is performed using plastic stent

into the intestine across the stricture site [Figure 2]. Next, the stent delivery system of the novel FCSEMS was inserted [Figure 3], and stent deployment was carefully performed from the intestine to the upper common bile duct (10 mm × 6 cm) [Figure 4]. Finally, EUS-HGS was successfully performed using a plastic stent (Gadelius Medical Co, Ltd, Tokyo, Japan) without any adverse events [Figure 5 and Video 1]. No stent dysfunction was seen until the patient's death 4 months later. This stent may have clinical impact in stent deployment under both ERCP and EUS guidance, although additional cases are needed for its complete clinical evaluation.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other

clinical information to be reported in the journal. The patient understand that his name and initial will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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