


DEN Video Article

Self-assembling peptide gel application to achieve endoscopic hemostasis for fistula bleeding after lumen apposing metal stent removal

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BRIEF EXPLANATION

RECENTLY, A NOVEL synthetic self-assembling peptide (PuraStat; 3-D Matrix Ltd, Tokyo, Japan), which is approved for hemostasis in endoscopic procedures, was launched. A few reports addressed the feasibility and effectiveness of PuraStat for gastrointestinal bleeding;^{1–4} however, to the best of our knowledge, its application for fistula bleeding after lumen apposing metal stent (LAMS) removal had never been reported. Thus, we report an effective PuraStat application for fistula bleeding hemostasis after LAMS removal (Video S1). A 70-year-old woman was admitted to our hospital for LAMS (Hot AXIOS; Boston Scientific, Marlborough, MA, USA) removal. The 20 mm LAMS was placed 2 months earlier by endoscopic

ultrasound-guided cystogastrostomy for a refractory infected pancreatic pseudocyst. Abdominal enhanced computed tomography on admission showed improvement of the pancreatic cyst and no hemorrhagic lesions, such as pseudoaneurysms, around the LAMS (Fig. 1a). Endoscopic view using a side-viewing endoscope revealed a granulation polyp ingrowth into the LAMS in the stomach. We resected the granulation polyp using a polypectomy snare without bleeding (Fig. 1b,c). Subsequently, the LAMS was removed using grasping forceps. However, active bleeding from the fistula occurred (Fig. 2a). The endoscope was exchanged for an upper forward-viewing scope to achieve hemostasis. However, since the fistula had gradually narrowed, the bleeding point could not be clearly identified. Therefore, 3 mL of PuraStat was applied to the suspected bleeding site

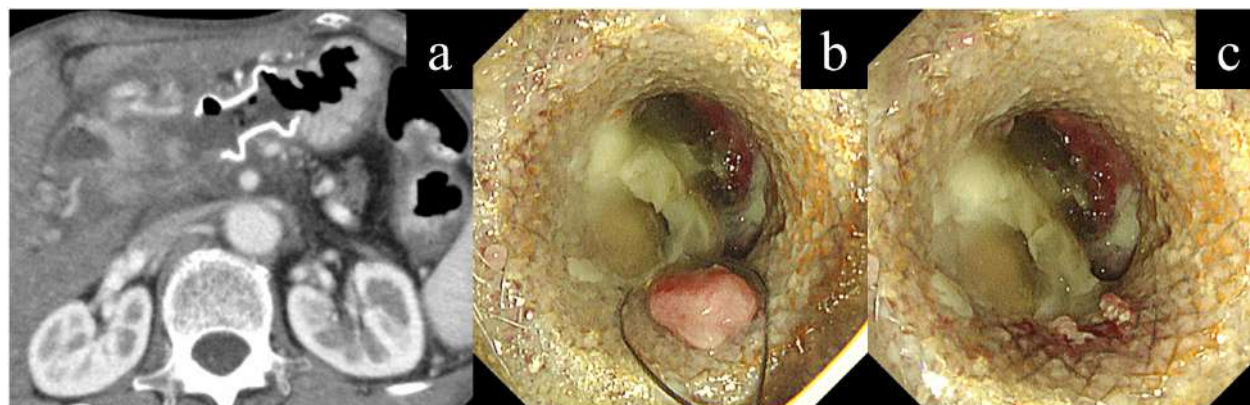


Figure 1 (a) Computed tomography showing the lumen apposing metal stent (LAMS) placed by endoscopic ultrasound-guided cystogastrostomy for an infected pancreatic cyst 2 months earlier and no hemorrhagic lesions such as pseudoaneurysms. (b) Endoscopic image showing the LAMS with granulation polyp ingrowth. (c) The granulation polyp was resected using a polypectomy snare without bleeding.

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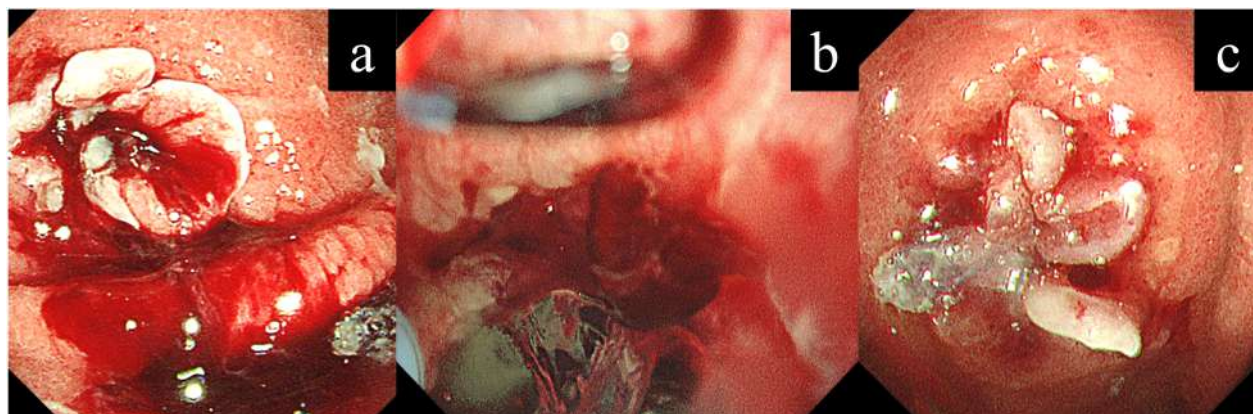


Figure 2 (a) After the lumen apposing metal stent removal, active bleeding from the fistula occurred. (b) PuraStat was applied to the suspected bleeding site using a dedicated catheter. (c) Hemostasis was achieved after PuraStat application.

(Fig. 2b) and hemostasis was achieved (Fig. 2c). The patient was discharged after 4 days without any evidence of recurrent bleeding. PuraStat is a useful option for fistula bleeding hemostasis after LAMS removal because PuraStat hemostasis was effective and technically easy.

Authors declare no conflict of interest for this article.

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SUPPORTING INFORMATION

ADDITIONAL SUPPORTING INFORMATION may be found in the online version of this article at the publisher's web site.

Video S1 PuraStat application to achieve endoscopic hemostasis for fistula bleeding after lumen apposing metal stent removal.