

A new endoscopic therapy for an intraluminal diverticulum of the duodenum

UCTN



Figure 1 Conventional radiograph showing intraluminal diverticulum of the duodenum projecting within the lumen of the second duodenum.



Figure 2 Barium retention in both the bulbus and intraluminal diverticulum of the duodenum.

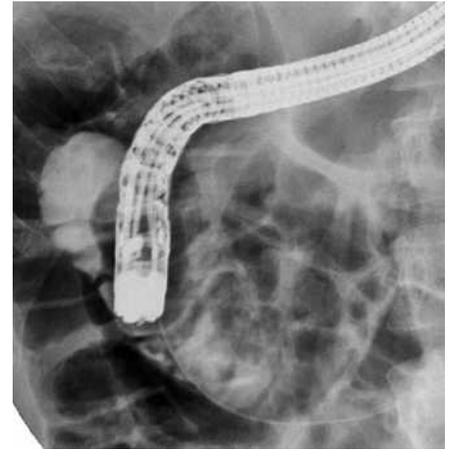


Figure 3 Hydrosoluble contrast injection in the diverticulum and in the duodenal lumen through the perforation of the diverticulum.

We report the case of a 33-year-old woman with dyspeptic symptoms and 5 kg weight loss in 5 months.

During upper gastrointestinal endoscopy at another institution, access to the second part of the duodenum had not been possible for reasons that were unclear. At our hospital, a barium follow through revealed a sac-like contrast-containing structure within the duodenal lumen, suggestive of an intraluminal diverticulum of the duodenum (IDD) (Figure 1 and 2). Repeat endoscopy confirmed that the second portion of the duodenum could only be reached through a tiny passage at the level of the genu superius, laterally to the diverticular orifice.

After obtaining consent and with the aid of a therapeutic endoscope, we punctured the bottom of the diverticulum with a needle knife papillotome. A 0.035-inch guide wire was introduced in the hole, and hydrosoluble contrast material was injected above and below the puncture site to confirm the exact localization of the IDD (Figure 3). Consequently the puncture site was enlarged using a 7-Fr cystogastrotome, allowing the introduction of an insulated-tip needle knife to incise the diverticular wall longitudinally,

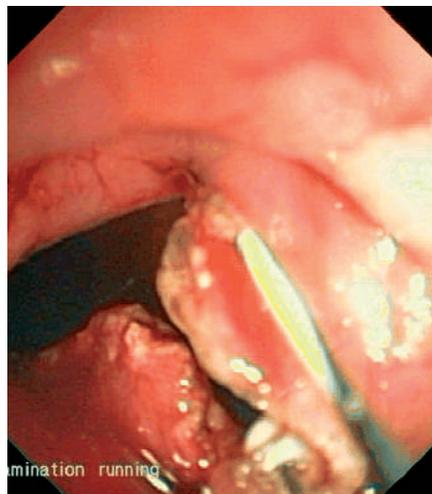


Figure 4 Endoscopic view from within the diverticulum, showing progression of the diverticulotomy using the insulated-tip knife; note the presence of the guide wire in the incision orifice.



Figure 5 Endoscopic view of the genu superius from the bulbus showing complete healing of the mucosa and patency of the duodenum.

up to the diverticular mouth at the genu superius (Figure 4 and video sequences). Endoscopic control with side-viewing scope identified both the papilla and the presumed location of the intramural part of the common bile duct laterally to the section. No immediate or delayed complication occurred. A control endoscopy was performed 1 month later showing complete healing and easy passage to the second duodenum (Figure 5). Clinical evaluation, 8 months postprocedure revealed continued absence of the dyspeptic symptoms, and no additional weight loss.

Videos 1–3

Sequence 1 Inspection of the intraluminal diverticulum of the duodenum. Sequence 2 Perforation of the diverticular sac using a needle-knife papillotome. Sequence 3 Progressive incision of the diverticular septum with the insulated-tip knife.

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IDD is a rare developmental anomaly found in adulthood [1–3]. The main symptoms are related to partial or intermittent obstruction. The most common complications include bleeding, acute or recurrent pancreatitis, cholangitis, and intussusception [3,4]. Several techniques of endoscopic management of IDD have been described [4,5]. The present procedure allows avoidance of trauma to the papilla, the common bile duct, or the opposite duodenal wall.

Endoscopy_UCTN_Code_TTT_1AO_2AN

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