

## Endoscopic needle-knife treatment of refractory ileo–ascending anastomotic stricture

A 45-year-old man with Crohn's disease diagnosed in 1988 who had undergone an ileocecal resection with an end-to-side anastomosis in 1995 presented with pain in the right lower abdomen. A colonoscopy was performed using an Olympus colonoscope (Tokyo, Japan), during which a noninflamed fibrotic stricture of the anastomosis that could not be passed by the endoscope was found (● Fig. 1). Because the patient refused surgery, six balloon dilations of the stricture were performed at 3-monthly intervals. Unfortunately these resulted in limited improvement in both the degree of stenosis and the patient's symptoms.

In order to overcome the stricture, it was decided to incise the fibrotic bridge with a needle-knife papillotome (Zimmon needle-knife papillotome; Cook Medical

Europe, Limerick, Ireland; ● Fig. 2). It was possible to make this incision safely because of a perfect view of the tissue bridge, the enteral loop, and the colonic loop in a parallel position. After the incision had been made, the endoscope was able to be passed beyond the anastomosis. Normal ileal mucosa was seen immediately beyond the anastomosis. At follow-up colonoscopy 3 months later, it was still possible to pass the endoscope beyond the anastomosis. During 7 months of follow-up, the patient has remained symptom free.

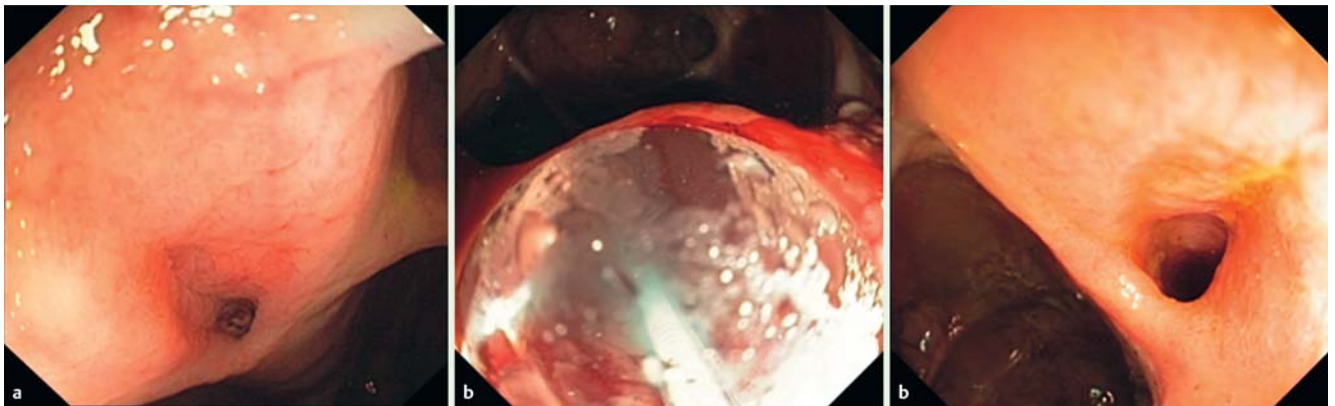
Fibrotic strictures of the ileo–ascending anastomosis are common complications of Crohn's disease after ileocecal resection [1]. Drug treatment is ineffective in the absence of active inflammation. To minimize the need for multiple resections,

bowel-conserving strategies that include surgical stricturoplasty and endoscopic balloon dilation have been developed. The long-term success rate of endoscopic dilations is high (80%) [2].

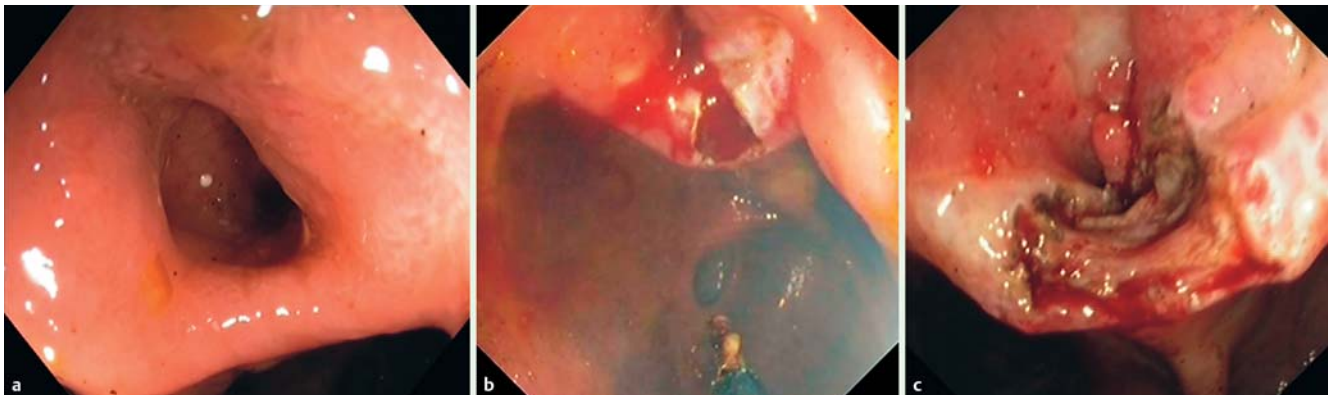
Only a few case series of endoscopic needle-knife incision have been published. These include needle-knife incision of upper gastrointestinal anastomotic strictures [3], anastomotic sinuses [4], and rectal anastomotic strictures [5]. To our knowledge, we present the first case of a successful needle-knife incision of an ileo–ascending anastomotic stricture in a patient with Crohn's disease. Balloon dilation can sometimes be ineffective, especially in very rigid fibrotic strictures, and in these cases needle-knife incision might provide an alternative treatment to balloon dilation.

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**Competing interests:** None



**Fig. 1** Appearances during colonoscopies performed in a patient with Crohn's disease showing the ileo–ascending anastomotic stricture: **a** before balloon dilation; **b** during balloon dilation; **c** 3 months after balloon dilation.



**Fig. 2** Colonoscopic appearance showing the ileo–ascending anastomotic stricture: **a** before needle-knife incision; **b** during needle-knife incision; **c** after needle-knife incision.

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