

Omental patch for closure of a cecal perforation during endoscopic resection of a laterally spreading tumor

We present the case of a 65-year-old man with long-standing ulcerative colitis referred to the Digestive Endoscopy Unit of Humanitas Research Hospital (Milan, Italy) to undergo endoscopic removal of a 45-mm granular laterally spreading tumor of the cecum (► **Fig. 1**) [1].

The procedure was performed using a standard high definition colonoscope (EG-6000WR; Fujifilm, Tokyo, Japan) under deep sedation and carbon dioxide insufflation. After lesion assessment, including chromoendoscopy with indigo carmine, a decision was made to attempt removal by underwater endoscopic mucosal resection.

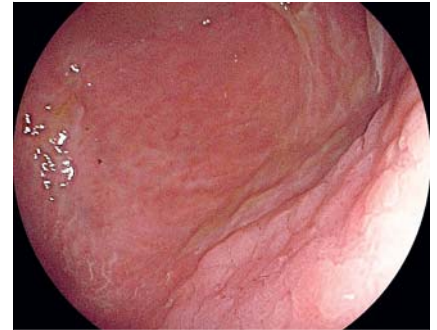
After marking the edge of the lesion with snare tip cautery, elevation of the lesion was performed by injection of saline-diluted adrenaline into the submucosal space. Injection was difficult due to the presence of fibrosis. After the initial mucosal resections, the procedure was interrupted after identification of the “target sign” and exposure of omental fat (Sydney’s type V) [2, 3]. The omental fat was suctioned into the cecum and fixed to the adjacent mucosa with hemoclips. The clips were then pulled together with

an endoloop to achieve complete closure of the mural defect by creation of an omental patch (► **Fig. 2**, ► **Video 1**).

A subsequent abdominal computed tomography scan revealed the absence of pneumoperitoneum or fluid collection (► **Fig. 3**). The patient was managed by conservative measures and, because of his clinical history and the incomplete resection of the lesion, a referral was made for elective colectomy. Surgical pathology revealed a tubular adenoma with low grade dysplasia.

Owing to the presence of submucosal fibrosis in patients with ulcerative colitis, therapeutic endoscopy is more challenging and has an increased risk of adverse events. If recognized immediately, endoscopic closure of an iatrogenic perforation could be considered, depending on the size and type of perforation, as well as endoscopist expertise [4]. In the current case, creation of an omental patch provided definitive closure of the cecal perforation. Ultimately, the final clinical outcome depends on the timing and efficacy of intervention.

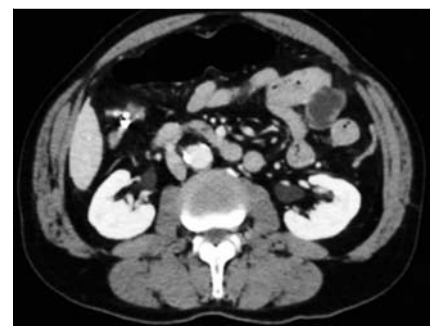
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► **Fig. 1** Endoscopic image of a granular laterally spreading tumor in the cecum.



► **Fig. 2** Endoscopic closure of the mural defect by creation of an omental patch.



► **Fig. 3** Computed tomography image confirming absence of pneumoperitoneum or fluid collection.



► **Video 1** Creation of an omental patch for closure of a perforation during endoscopic resection.

Competing interests

None

The authors

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