

## Closure of an iatrogenic rectal perforation with the endoloop/clips technique in a purse-string fashion

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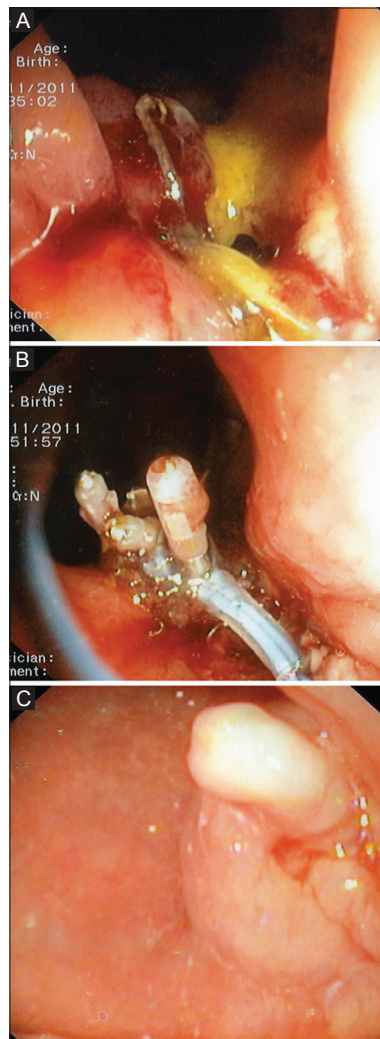
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The endoloop/clips technique was first used by Endo *et al* [1] to close large mucosal defect in 32 patients after endoscopic mucosal resection of gastric mucosal tumors. By using this technique we recently closed a large (>3 cm) oval rectal perforation after retroflexion of the colonoscope in a healthy rectum during colonoscopy [2].

We herein describe a new case of successful repair of an iatrogenic rectal perforation by the endoloop/clips technique.

A 73-year-old patient was referred for endoscopic treatment of an iatrogenic perforation in the anterior rectal wall (Fig. 1A) after a radical prostatectomy for cancer. Using a two-channel colonoscope the perforation edges were initially cauterized by argon plasma coagulation to stimulate the inflammatory reaction and local collagen synthesis. Through one of the working channels an open endoloop (MAJ-254, Olympus) was placed on the perforation site, and through the second channel the upper and lower arm of endoloop were fixed on the lower and upper margin of the perforation area with two metal clips (HX-600-900, Olympus). The endoloop was then tightened slowly to bring closer the perforation edges. Two more endoclips were placed to strengthen the closure (Fig. 1B). The patient had an uneventful recovery and a colonoscopy at 3-month follow up showed only a scar at the procedure site with the presence of reactive hyperplastic tissue and without complaints (Fig. 1C).

We believe that the endoloop/clips technique, which resembles surgical suture, is a promising method that endoscopists should be familiar with, as it can be used safely and efficiently to close large iatrogenic perforations, reducing the need for surgical intervention and the cost of a long hospitalization.



**Figure 1** (A) Endoscopic view of a recent iatrogenic perforation in the anterior rectal wall. (B) Endoloop/clips technique in a purse-string fashion. (C) Three months later, complete healing with presence of reactive hyperplastic tissue

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