A research team from Italy described a case of a sigmoid perforation repaired with endoclips and endoloops, and sealed with fibrin glue. The effectiveness of this approach was confirmed on laparoscopic examination.

Colonoscopy is considered a safe procedure, although complications can occur. The most dreaded of these is iatrogenic perforation. The literature reports perforation rates of 0.03%-0.8% for diagnostic procedures, and a rate of 0.15%-3% for therapeutic procedures. Mechanisms of perforation are the result of either mechanical disruption of the colonic wall (e.g. thermal injury, forced push into a diverticulum, or stretching of the bowel with loops or the slide-by technique) or excessive air insufflation. After perforation, prompt abdominal surgery is usually recommended, particularly in the last few years, following the introduction of laparoscopic approaches in clinical practice. Nevertheless, conservative treatment is a feasible and effective option for patients who are clinically stable and without peritonism or life threatening signs.

A research article published on February 28, 2011 in the World Journal of Gastroenterology addresses this question. The authors reported a case of a 63-year-old male who experienced an iatrogenic sigmoid perforation repaired combining three endoscopic techniques.

The lesion was large and irregular with three discrete perforations, therefore, the authors decided to close it by placing one clip per perforation, and then connecting all the clips with two endoloops. Finally they chose to use a fibrin glue injection to obtain a complete sealing. Four days after the colonoscopy the patient underwent a laparoscopic right hemicolectomy due to evidence of a large polyp of the caecum with high grade dysplasia and focal carcinoma in situ. Inspection of the sigma showed complete repair of the perforation.

This report underlines how a conservative approach, together with a combination of various endoscopic techniques, can resolve complicated perforations without the need for surgical intervention.


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