

## REFERENCES

- van Hooft JE, Uitdehaag MJ, Bruno MJ, et al. Efficacy and safety of the new WallFlex enteral stent in palliative treatment of malignant gastric outlet obstruction (DUOFLEX study): a prospective multicenter study. *Gastrointest Endosc* 2009;69:1059-66.
  - Pinto IT. Malignant gastric and duodenal stenosis: palliation by peroral implantation of a self-expanding metallic stent. *Cardiovasc Intervent Radiol* 1997;20:431-4.
  - Telford JJ, Carr-Locke DL, Baron TH, et al. Palliation of patients with malignant gastric outlet obstruction with the enteral Wallstent: outcomes from a multicenter study. *Gastrointest Endosc* 2004;60:916-20.
  - Bessoud B, de Baere T, Denys A, et al. Malignant gastroduodenal obstruction: palliation with self-expanding metallic stents. *J Vasc Interv Radiol* 2005;16:247-53.
  - van Hooft J, Mutignani M, Repici A, et al. First data on the palliative treatment of patients with malignant gastric outlet obstruction using the WallFlex enteral stent: a retrospective multicenter study. *Endoscopy* 2007;39:434-9.
  - Thumbe VK, Houghton AD, Smith MS. Duodenal perforation by a Wallstent. *Endoscopy* 2000;32:495-7.
- doi:10.1016/j.gie.2009.03.1165

### The Boston bowel preparation scale: reliable not only for colonoscopy-oriented research but clinical practice also

To the Editor:

We appreciate the study by Lai et al<sup>1</sup> entitled "The Boston bowel preparation score: a valid and reliable instrument for colonoscopy-oriented research," and we have been using their concept in recording the quality of the preparation after washing, suctioning, and cleaning out the colon instead of the appearance on first look to evaluate the quality of colon preparation. Initially, we evaluated the quality of the colon preparation on the basis of the cecal photographs, based on the fact that the cecum appears to be the last to get cleaned out and is often obscured by stool despite excellent cleansing of the rest of the colon.<sup>2</sup> We later devised a scale<sup>3</sup> in which the final score is given by assessing the quality of preparation in each colon segment rather than scoring the colon as a whole, as suggested by Lai et al.<sup>1</sup> We have observed a correlation between the quality of the colon preparation and polyp detection rate.

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## REFERENCES

- Lai EJ, Calderwood AH, Doros G, et al. The Boston bowel preparation score: a valid and reliable instrument for colonoscopy-oriented research. *Gastrointest Endosc* 2009;69:620-5.
- Mittal S, Mummadi RR, Trang T, et al. Excellent cecal cleansing with split dose of phosphosoda and 30 mg of bisacodyl: a retrospective study using cecal photograph as a reflector of the quality of colon cleansing. *Am J Gastroenterol* 2007;102:S162.

- Mittal S, Sagi S, Raju G. How good is the quality of colonoscopy preparation under monitored anesthesia care (MAC)? *Am J Gastroenterol* 2008;103:S192.

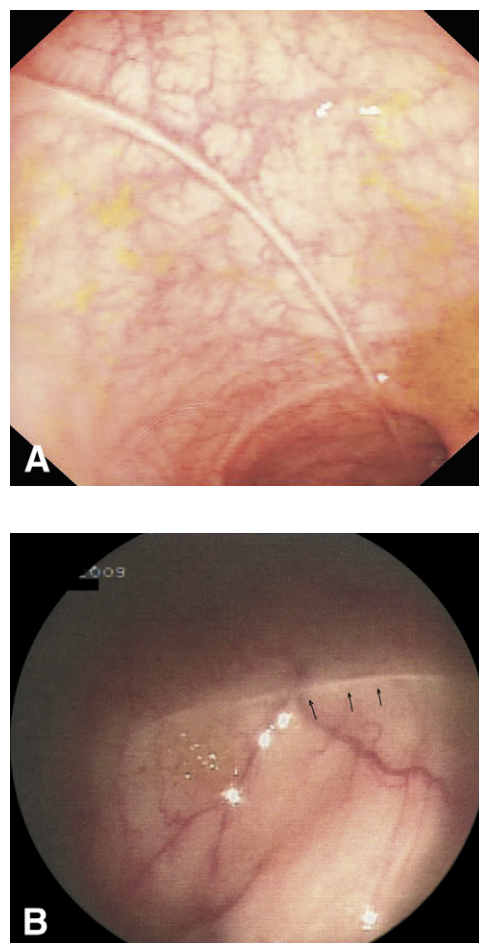
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### Mucosal scars in collagenous colitis

To the Editor:

I read with interest the report by Couto et al<sup>1</sup> on the endoscopic findings in collagenous colitis, describing unique spontaneous linear-type scars in the left colon.<sup>2</sup> In fact, collagenous colitis causes impressive scars (Fig. 1).

We previously hypothesized that tears can occur spontaneously in microscopic colitis after only gentle insufflation of the colon.<sup>3</sup> It is plausible that the increased intracolonic pressure in the left colon leads to spontaneous mucosal tears with defecation. When submucosal collagen is abundant, as in microscopic colitis, these tears will then heal to scarlike ridges (chronic changes). It is attractive to speculate that the lesions reported by Couto et al are indeed a continuum of lesions and might even be observed in the same



**Figure 1.** A and B, Left colon scars, close to the splenic flexure, both diagnosed as collagenous colitis on biopsy.

patient. The same mechanism would cause tears in the right side of the colon. However, the different functional pressures “protect” the right side of the colon from spontaneous tears. Acute mucosal tears have so far been reported to occur mainly during endoscopy, when the required insufflation pressures increase the colon diameter and hence the tension on the bowel wall.

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#### REFERENCES

1. Couto G, Bispo M, Barreiro P, et al. Unique endoscopy findings in collagenous colitis. *Gastrointest Endosc* 2009;69:1186-8.
2. Hashimoto Y, Endo Y, Kuroki Y, et al. Collagenous colitis with unique colonoscopic findings. *Endoscopy* 2008;40(Suppl 2):E162.
3. Koulaouzidis A, Henry JA, Saeed AA. Mucosal tears can occur spontaneously in collagenous colitis. *Endoscopy* 2006;38:549.  
doi:10.1016/j.gie.2009.05.003

#### Response:

We thank Dr Koulaouzidis for sharing the interesting images and the hypothesized mechanism underlying these endoscopic lesions. Other reports, also showing mucosal scarring in collagenous colitis, have been recently published.<sup>1,2</sup> Allende et al<sup>3</sup> also report on colectomy specimens from collagenous colitis patients with ragged mucosal defect and induration of the wall, suggestive of scarring.

These mucosal scars are insufflation-related or spontaneous mucosal tears (secondary to mucosal stretching during normal peristalsis and defecation) that ultimately healed.

The most striking argument in favor of this sequence comes from a postcolonoscopy scar diagnosed by Wickbom et al<sup>4</sup> 7 days after mucosal tears were seen. As we emphasize in our case report,<sup>5</sup> we do agree with the proposed mechanism of colonic mucosal tearing of Dr Koulaouzidis, in line with the hypothesis of Cruz-Correa et al<sup>6</sup> and Sherman et al.<sup>7</sup>

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#### REFERENCES

1. Hashimoto Y, Endo Y, Kuroki Y, et al. Collagenous colitis with unique colonoscopic findings. *Endoscopy* 2008;40(Suppl 2):E162.
2. Umeno J, Matsumoto T, Nakamura S, et al. Linear mucosal defect may be characteristic of lansoprazole-associated collagenous colitis. *Gastrointest Endosc* 2008;67:1185-91.
3. Allende DS, Taylor SL, Bronner MP. Colonic perforation as a complication of collagenous colitis in a series of 12 patients. *Am J Gastroenterol* 2008;103:2598-604.
4. Wickbom A, Lindqvist M, Bohr J, et al. Colonic mucosal tears in collagenous colitis. *Scand J Gastroenterol* 2006;41:726-9.
5. Couto G, Bispo M, Barreiro P, et al. Unique endoscopy findings in collagenous colitis. *Gastrointest Endosc* 2009;69:1186-8.
6. Cruz-Correa M, Milligan F, Giardiello FM, et al. Collagenous colitis with mucosal tears on endoscopic insufflation: a unique presentation. *Gut* 2002;51:600.
7. Sherman A, Ackert JJ, Rajapaksa R, et al. Fractured colon: an endoscopically distinctive lesion associated with colonic perforation following colonoscopy in patients with collagenous colitis. *J Clin Gastroenterol* 2004;38:341-5.  
doi:10.1016/j.gie.2009.06.002