

## PICTURES IN DIGESTIVE PATHOLOGY

# Necrotic left colitis due to hot water enema

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### CASE REPORT

A 77-year-old man was admitted to emergencies for abdominal pain after instillation of a hot water enema in his home.

On admittance he had a fever of 38 °C, an affected general status, leucocytosis and signs of peritoneal irritation in the lower hemiabdomen. Abdominal CT showed a transmural thickening of the rectosigmoid wall (Fig. 1).

Diagnosed with colitis due to scalding he received a rectosigmoidoscopy at 72 hours (Fig. 2), which from the rectosigmoid junction revealed a necrotic mucosa extending some 15-20 cm. After making good progress he was discharged on the 15<sup>th</sup> day after admittance.

A month later, the patient presented with rectal tenesmus and episodes of diarrhoea. Colonoscopy revealed an impassable stricture, 3 cm long and some 10 cm from the anus. After two sessions of endoscopic balloon dilatation, which was clinically ineffective, insertion of a biodegradable stent (BDS) was indicated (SX ELLA-BA Stent, Ella CS, Hradec Kralove, Czech Republic). This was fitted 3 months after admittance (Fig. 3) and the patient was asymptomatic a week after insertion and three months (Fig. 4) after degradation of the biodegradable stent (BDS).



Fig. 1. Abdominal CT with intravenous contrast and rectal enema: An irregular circumferential thickening of the sigmoid wall is seen to affect an expanse of approximately 20 cm of the sigmoid colon. The thickening is hypodense and mamelonated, without preservation of the layered structure. No pneumoperitoneum is observed.



Fig. 2. Rectosigmoidoscopy image showing a circumferential ring some 15 cm from the anal margin. Note the dull-looking blackish mucosa suggesting a mucosal necrosis of some 20 cm, with indemnity of the distal mucosa.



Fig. 3. Rectosigmoidoscopy image showing the biodegradable stent at the site of the stricture. An ERCP catheter was inserted easily through the stenosis and enabled instillation of contrast to the proximal colon. A very irregular granular tract was observed measuring some 4 cm. After insertion of a guide, dilatation was performed at 2.5 atm (9 mm) to allow for insertion of the biodegradable stent introducer (in parallel) under endoscopic control. The distal end of the uncoated biodegradable stent was left 1.5 cm from the edge of the stricture. Subsequently, following injection of contrast to the proximal intestine, cyanocrylate was instilled under endoscopic control as an adhesive to prevent stent migration.

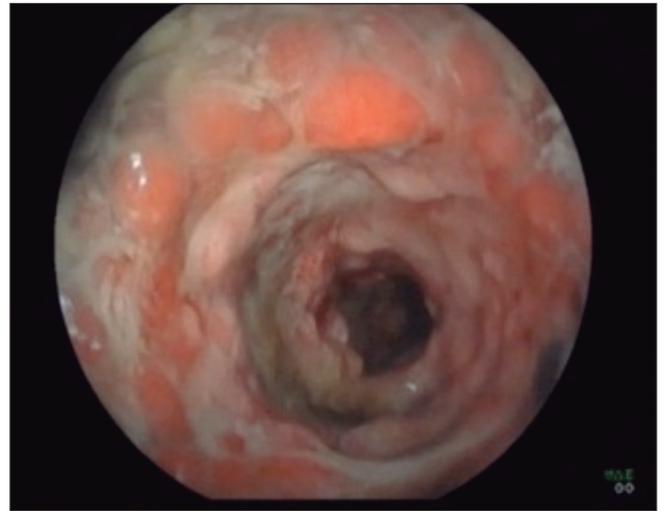


Fig. 4. Rectosigmoidoscopy image 3 months after insertion of the biodegradable stent. Note the remains of the stent still in the process of degradation and an increase in the diameter of the colonic lumen compared to the previous endoscopy.

## DISCUSSION

The most common complication arising from tissue damage due to scalding is the appearance of a cicatricial stricture of the affected segment (1).

The use of a BDP to treat benign cicatricial strictures is generally increasing (2). It could be an intermediate step between balloon dilatation and surgery, but it has still not proved effective for this indication.

In our experience, the use of a BDP after an initial failed attempt at balloon dilatation (3) may be an efficient and alternative technique to surgery (4), although comparative studies are needed to confirm this hypothesis.

## REFERENCES

1. Kim S, Cha JM, Lee CH, Shin HP, Park JJ, Joo KR, et al. Rectal perforation due to benign stricture caused by rectal burns associated with hot coffee enemas. *Endoscopy* 2012;44:E32-E33.
2. Bong-Hyeon K, Hyung-Jin K, Kang Moon L, Hyeon-Min C. Intractable rectal stricture caused by hot water enema. *J Korean Surg Soc* 2011;81:350-4.
3. Johansson C. Endoscopic dilation of rectal strictures: A prospective study of 18 cases. *Dis Colon Rectum* 1996;39:423-8.
4. Garcea G, Sutton CD, Lloyd TD, Jameson J, Scott A, Kelly MJ. Management of benign rectal strictures: A review of present therapeutic procedures. *Dis Colon Rectum* 2003;46:1451-60.