Application of endoscopic double illumination technique for management of anastomotic site membranes

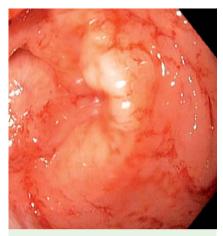


Fig. 1 Colonoscopy in a 87-year-old woman showing a membrane at the colorectal anastomosis site.

Colonoscopy in a 87-year-old woman showed a friable, erythematous rectosigmoid mass approximately 18 cm from the anal verge, engulfing one-half to twothirds of the circumference. Multiple biopsy samples were obtained, which were reported as carcinoma in situ. Laparoscopic coloproctectomy with colorectal anastomosis and diverting loop ileostomy was done. Repeat colonoscopy showed complete closure of the anastomosis site by a membrane (**> Fig. 1**). Two GIF H-180 esophagoduodenoscopy (EGD) scopes (Olympus, New York, USA) were simultaneously passed from the anus (lower scope) and the colostomy site (upper scope) under fluoroscopic guidance and advanced to the rectum pouch and distal end of the colon, respectively (**>** Fig.2a). The light source from both the scopes was easily seen on both sides (**• Fig. 2b**). The mucosal wall at the area of the previous colorectal anastomosis was cannulated using an endo-knife under direct proximal and distal visualization via the lower scope (**> Fig. 3a**). Then, using the lower scope again, a throughthe-scope balloon was passed over the guide wire and dilation was carried out up to a maximum diameter of 8mm

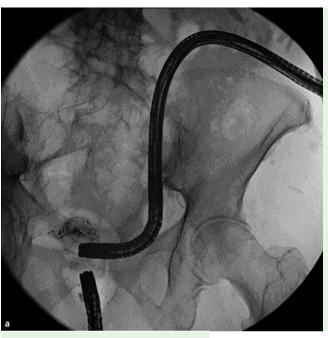


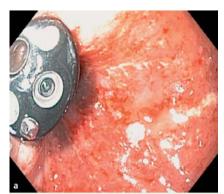
Fig.2 a Fluoroscopic images of the lower (from anus) and upper (from colostomy site) scopes. b Transillumination.

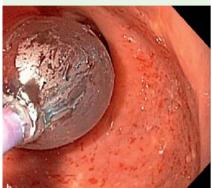


(• Fig. 3b). Serial dilations were done up to 20 mm (• Fig. 3c). Complete closure of an anastomotic site by mucosal membranes is a rare finding, for which endoscopic double illumination technique [1 – 3] is a safe and convenient procedure, especially in patients who are already surgically diverted.

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Competing interests: None





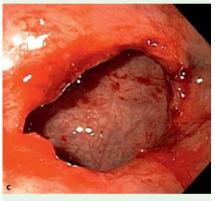


Fig. 3 a Membrane incised and lower scope visualized. b Balloon dilation. c Dilation to 20 mm.

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Bibliography

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