Use of a colonoscope to perform endoscopic therapy in patients with active bleeding from posterior duodenal and gastric ulcers

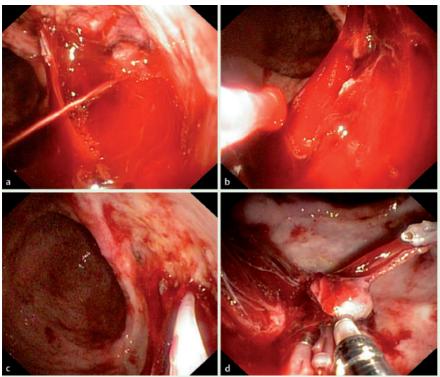
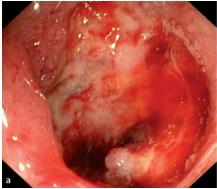


Fig. 1 Large posterior gastric ulcer with active spurting (a). Injection of epinephrine could only be applied to parts of the ulcer. Note that the needlecatheter exits the endoscope on the left (7 o'clock position) making it difficult to inject into the proximal and right side of the lesion (b). The needle exits on the right side (5 o'clock position) of the colonoscope allowing the endoscopist to inject into the base of the ulcer (c). Note that the needle enters the ulcer at a tangential direction from the right side. In this patient, multiple clips had to be delivered to the bleeding vessel (d). Again, application of the clips was easier from the right side.



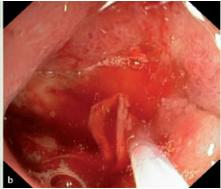


Fig. 2 Posterior located duodenal bulb ulcer (a). The injection needle exits the colonoscope on the right side, making it easier to treat this lesion (b).

Endoscopic therapy for bleeding peptic ulcers located in the posterior duodenum or stomach can be cumbersome because the working channel of the gastroscope is located on the left, making it difficult to treat these ulcers, which are generally located on the right side [1-3]. The working channel of the colonoscope is located on the right side (i.e. at the 5 o'clock position), thus offering potential improvement in the application of endoscopic therapies for such lesions.

We have used a colonoscope to achieve hemostasis in four patients (mean age 73 years, range 65 – 91 years) with posterior duodenal or gastric ulcers in whom therapy using a gastroscope had failed. All patients presented with significant hemorrhage (mean pulse 102 bpm, range 90 – 110 bpm; mean blood pressure 95/60 mmHg; mean hemoglobin level 7.5 g/dL, range 5.9 – 9.0 g/dL). All ulcers were actively bleeding and had a mean diameter of 20 mm (range 10 – 30 mm). After failed hemostasis, a colonoscope

(CFQ165I, Olympus, Germany) was used. The accessory equipment could be easily advanced through the working channel and its exit at the 5 o'clock position permitted endotherapy with epinephrine and clips (HX-610−090L, Olympus, Japan) (○ Fig. 1 and 2). The clips were always expanded before application just distal to the ulcer. Then the clip-delivery catheter was pulled inside of the scope, maintaining the expanded clip just a few millimeters distally to the scope tip. The colonoscope was then carefully pulled

back, while the expanded clip was advanced towards the visible vessel or bleeding lesion, where it was released. The mean number of clips used was 3 (range 2–5). Immediate and permanent hemostasis was achieved in all patients. We conclude that, due to the position of the working channel on the right side, a colonoscope may be a useful alternative for the successful application of endotherapy for bleeding ulcers located in the posterior duodenum or stomach.

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Bibliography

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