

## Loop-and-let-go technique for a bleeding, large sessile gastric gastrointestinal stromal tumor (GIST)

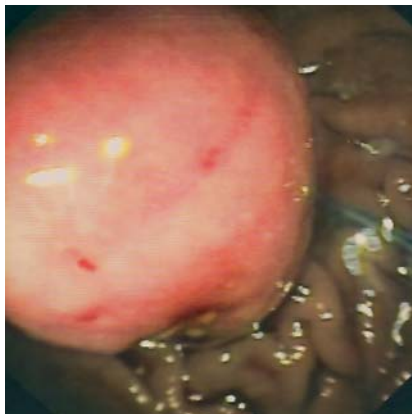
A 77-year-old woman was admitted for syncope followed by melena. She was under oral anticoagulant therapy for atrial fibrillation. An urgent upper endoscopy revealed active oozing of blood from an ulcer crater on the surface of a 3.5-cm, sessile submucosal tumor at the gastric fundus. Endoscopic hemostasis was achieved by epinephrine injection and application of hemoclips (● Fig. 1). Although surgical gastric wedge resection is considered the gold standard treatment for such lesions  $\geq 2$  cm in size, since the patient presented a high risk for general anaesthesia and recurrent bleeding as well as the need of further anticoagulant therapy, we were forced to consider endoscopic treatment. Endoscopic snare resection and submucosal dissection are associated with a significant risk of perforation [1]. Endoscopic band ligation technique has been described as effective for smaller lesions [2]. Another alternative, the endoloop technique, has also been recently reported as potentially effective, provided the loop is tightened around the base of the lesion, which results in tissue strangulation and slow mechanical transection of a gastrointestinal stromal tumor (GIST), that is, ischemic necrosis followed by spontaneous sloughing [3].

After endoscopic ultrasound confirmed the diagnosis of GIST, using a standard single-accessory channel endoscope, an endoloop was tightened around the tumor base until there was evidence of tissue congestion (● Fig. 2). After 7 days the lesion appeared necrotic (● Fig. 3), and after another 7 days half of it had dropped off, leaving a large eschar, but half of it was still in place and had revascularized. A second endoloop was placed at the base of the remaining lesion and tightened below the level of previous one, which appeared to be loose, until tissue congestion was again observed (● Fig. 4). After another 3 days, only a 2-cm fibrinous/necrotic eschar was found (● Fig. 5), and by 4 weeks, only a healed ulcer was distinguishable in the place of the previous GIST, with no sign of residual disease (● Fig. 6).

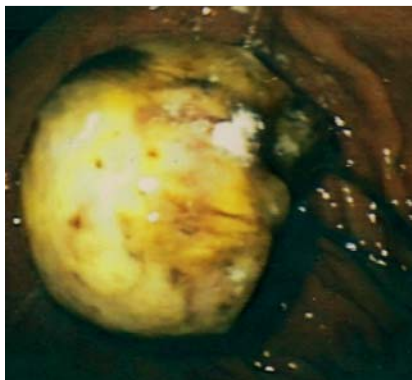
Thus, in cases in which surgery is contraindicated, the “loop-and-let-go” technique for GIST treatment could be a useful alternative.



**Fig. 1** Endoscopic hemostasis of a fundic gastric gastrointestinal stromal tumor (GIST) achieved by epinephrine injection and hemoclips.



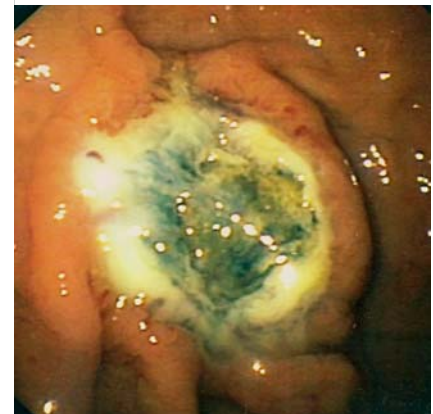
**Fig. 2** The endoloop was increasingly tightened around the tumor base until there were signs of tissue congestion.



**Fig. 3** Necrotic tissue evident after 7 days after treatment.



**Fig. 4** After 14 days of the treatment half of the lesion had revascularized and the half had sloughed off, leaving behind a large eschar. A second endoloop was placed below the previous one, which appeared loose, and tightened until tissue congestion was again observed.



**Fig. 5** After 17 days of application of the first endoloop, only a 2-cm fibrinous/necrotic eschar was left.



**Fig. 6** At 4 weeks from the initial treatment a healed ulcer was observed in place of the original tumor with no signs of residual disease.

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**Competing interests:** None

**A. Arezzo, M. Verra, A. Miegege,  
M. Morino**

Digestive, Colorectal and Minimal Invasive  
Surgery, University of Turin, Italy

## References

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## Bibliography

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## Corresponding author

**A. Arezzo**

Digestive, Colorectal and Minimal Invasive Surgery  
University of Turin  
corso Dogliotti 14  
10126 Torino  
Italy  
Fax: +39-0116332548  
alberto.arezzo@unito.it