Endoloop rescue therapy for a duodenal ulcer that re-bled under the clip base after application of an 11/3 traumatic over-the-scope clip

A 67-year-old patient with melena and symptoms of shock, along with additional clinical symptoms of fatigue and severe anemia (initial hemoglobin level 7.9 g/dL), was transferred to our intensive care unit. The patient had multiple co-morbidities with chronic renal failure, cardiac decompensation, peripheral arterial occlusive disease, and chronic obstructive pulmonary disease. Additionally, he had had a recent arterial embolus and, for this reason, was anticoagulated with heparin. A gastroscopy was performed 3 days after the patient had started anticoagulation therapy, when he presented with clinical signs of gastrointestinal bleeding. A Forrest IIa ulcer was seen in the descending duodenum and, because of the anticoagulation, definitive hemostasis was needed, being achieved following application of an 11/3 traumatic over-the-scope clip (OTSC; Ovesco, Tübingen, Germany). The patient's clinical course remained stable for the first 9 days. Unfortunately, on postoperative day 9, his physical condition progressively worsened with severe gastrointestinal bleeding, tachycardia, and hypotension, despite endoscopic intervention and transfusion of numerous red blood cell units (n = 8).

We decided to repeat a gastroscopy and found an active site of bleeding (Forrest Ib) under the OTSC, probably originating from the arteria gastroduodenalis. We assumed the OTSC had been wrongly positioned during the initial application with insufficient compression of the target vessel. Owing to our hypothesis of insufficient vessel compression, we decided to apply an endoloop (MAJ254; Olympus) under the OTSC in order to achieve sufficient compression of the vessel (Fig. 1; Video 1).

The further clinical course was uneventful and the patient rapidly recovered without restrictions. In keeping with the clinical picture, an endoscopic follow-up examination after 6 weeks showed persistent hemostasis with a healed ulcer. The OTSC and endoloop had both fallen off (Fig. 2).

In conclusion, it has been shown that the OTSC is a safe hemostatic tool [1, 2]; however, our case shows that precise
placement of the OTSC plastic cap is essential to achieve sufficient hemostasis. If misplacement occurs, re-bleeding after OTSC application can appear and treatment options have so far been limited, with possible options being fibrin glue injection, radiologic embolization, or surgery [3]. To the best of our knowledge, this case provides the first evidence that the application of an endoloop after re-bleeding under an OTSC is technically safe and could be an alternative endoscopic rescue option.

Competing interests

The authors declare that they have no conflict of interest.

The authors

Carlo Jung¹, Adrien Sportes², Volker Ellenrieder¹, Edris Wedi¹
¹ Department of Gastroenterology and Gastrointestinal Oncology, Center of Interdisciplinary Endoscopy, University Medical Center Göttingen, Georg-August-University, D-37075 Göttingen, Germany
² Institut Arnault TZANCK Gastroenterology Unit, Saint-Laurent-du-Var, France

Corresponding author

Edris Wedi, MD
Department of Gastroenterology and Gastrointestinal Oncology, Center of Interdisciplinary Endoscopy, University Medical Center Göttingen, Georg-August-University, D-37075 Göttingen, Germany
edris1@web.de

References