Over-the-scope clip used to treat duodenal ulcer can cause damage to ulcer base and massive bleeding

The efficacy of the over-the-scope clip (OTSC; Ovesco, Tübingen, Germany) to achieve primary hemostasis and prevent rebleeding has been demonstrated in the treatment of gastroduodenal ulcers [1]. Recent data have shown technical success and hemostasis rates of almost 100% [1–3]. We present the case of technical failure of an OTSC used for a rebleeding duodenal ulcer, leading to massive bleeding when the clip was released (► Video 1).

A 61-year-old man was admitted for hematemesis, anemia, and hypotension. A Forrest IIb ulcer located on the posterior wall of the duodenal bulb was treated by adrenaline and hot biopsy coagulation. He was readmitted a week later for a severe recurrence with hemorrhagic shock. Second gastroscopy confirmed rebleeding from the initial duodenal ulcer graded Forrest IIa, and hemostasis was achieved with hot biopsy forceps coagulation (► Fig. 1 a, b). We decided to prevent a new recurrence by applying an OTSC. Unfortunately, release of the OTSC damaged the ulcer base leading to a large defect on the arterial branch and resulting in acute hemorrhagic shock (► Fig. 1 c, d, ► Fig. 2 a). Endoscopic hemostasis appeared impossible and we transferred the patient as an emergency to the radiology unit.

A computed tomography (CT) scan confirmed a large arterial blush of 8 mm in diameter (► Fig. 2 b, c). Arterial embolization of the gastroduodenal and pancreaticoduodenal arterial ramifications was performed successfully (► Fig. 2 d). Five days later, the patient suffered from melena with hemodynamic instability. CT scan concluded rebleeding from the gastroduodenal artery that had undergone embolization. Fortunately, a successful surgical treatment was finally performed, which controlled the bleeding.

► Fig. 1 Endoscopic management of the duodenal ulcer. a Initial aspect with visible vessel (Forrest IIa), then rapid bleeding with arterial pulse (Forrest Ia). b Initial hemostasis was achieved with hot biopsy forceps coagulation. c Placement of the over-the-scope clip (OTSC; Ovesco, Tübingen, Germany) to prevent recurrence. d Release of the OTSC led to massive acute bleeding.
This case highlights the fact that OTSCs may sometimes dramatically worsen bleeding by ripping out the base of an ulcer and the bleeding vessel. Release of the OTSC may be more challenging in posterior wall and fibrous duodenal ulcers, as previously published [2]. Rescue OTSC placement should be performed in units equipped with interventional radiologists with experience in embolization for cases of massive bleeding.

Competing interests

None

The authors

Emilien Daire¹, Emmanuel Forte¹, Badis Mennassel², Charles-Eric Ber³, Emilie Roy⁴, Jérémie Jacques⁵, Mathieu Pioche¹
1 Department of Endoscopy and Gastroenterology, Pavillon L, Edouard Herriot Hospital, Lyon, France
2 Radiology Unit, Pavillon B, Edouard Herriot Hospital, Lyon, France
3 Anesthesiology Department, Pavillon L, Edouard Herriot Hospital, Lyon, France
4 Digestive Surgery Department, Edouard Herriot Hospital, Lyon, France
5 Department of Endoscopy and Gastroenterology, Dupuytren University Hospital, Limoges, France

References


Bibliography

DOI https://doi.org/10.1055/a-0885-9786
Published online: 2.5.2019
Endoscopy 2019; 51: E213–E214
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastrointestinal endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos