## VIDEO CASE REPORT

# Failure of over-the-scope clip to control duodenal ulcer bleeding despite successful application



Calvin J. Koh, MBBS, 1,2 Eunice X. X. Tan, MBBS 1,2

The over-the-scope clip (Ovesco; Ovesco Endoscopy AG, Tuebingen, Germany) has been designed for apposition of larger mucosal surfaces for GI perforations and for bleeding. The clip has some evidence of success in the treatment of GI bleeding, particularly

for large vessels for which standard hemostatic clips were not designed. A major limitation is that once the clip is deployed, the size and location of the clip make further endoscopic therapy more challenging.



Figure 1. Duodenal ulcer.

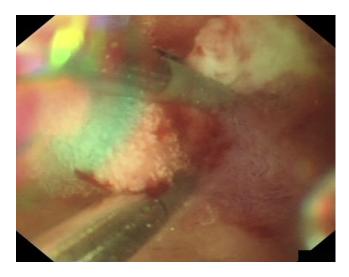


Figure 3. Subsequent hemostasis with through-the-scope clips.



Figure 2. Over-the-scope clip placement with continued bleeding.

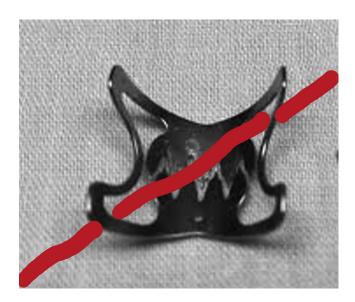


Figure 4. Illustration of potential gap in clip.

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#### **CASE AND PROCEDURE**

A 77-year-old woman, admitted for exacerbation of chronic obstructive pulmonary disease treated with prednisolone, presented 4 days later with melena and hypotension, with a drop in her systolic blood pressure from 96 to 84 mm Hg. Her hemoglobin level of 15.2 g/dL and hematocrit level of 49.3% dropped to 7.1 g/dL and 23.7%, respectively. Emergent upper endoscopy revealed a large, oozing (Forrest 1b), duodenal ulcer at the D1/D2 junction (Fig. 1). Care was taken to identify the ampulla, which was distal to the ulcer, before the beginning of hemostatic therapy. An over-the-scope clip (11/6 AT) was deployed successfully en face with the duodenal ulcer, with clear eversion of the ulcer base but no cessation of bleeding (Fig. 2). The deployment was then reviewed for possible issues with clip deployment and design, and a possible explanation for the device failure was derived.

The Ovesco clip was noted to be en face and deeply grasping the tissue mucosa of the duodenal ulcer; however, the maneuver was unsuccessful and there was still bleeding right in the middle of the everted ulcer. Although clip placement was successful, the vessel continued to bleed, suggesting that malplacement was not the reason for suboptimal hemostasis.

Successful hemostasis was subsequently achieved with a through-the-scope clip (Fig. 3). Although the patient did not undergo angiography, we hypothesize a possible mechanism through which this might occur: the Ovesco clip jaws were such that if a vessel were placed diagonally

at the 2 o'clock to 8 o'clock position, it is possible that the Ovesco clip could be deployed but not occlude the vessel, which could run along the gap between the jaws and the hinge (Fig. 4). Other possibilities would include collateral feeding vessels from another arterial arcade.

### **CONCLUSION**

This article reports a case of successful deployment yet unsuccessful hemostasis, which would have potential implications in the use of the current over-the-scope clip as primary therapy for GI bleeding (Video 1, available online at www.VideoGIE.org).

#### DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Division of Gastroenterology and Hepatology, Medicine, National University Hospital (1), Faculty of Medicine, National University of Singapore (2), Singapore.

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