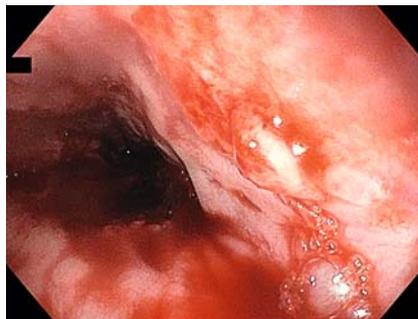


## Over-the-scope clip as salvage therapy in refractory bleeding from esophageal variceal band ligation-induced ulcer

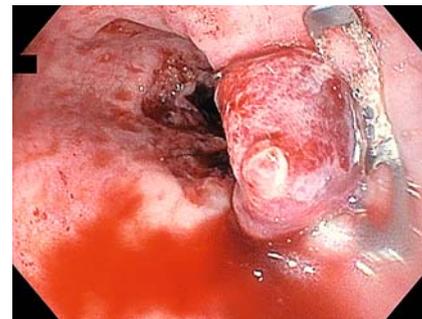
Endoscopic variceal band ligation (EVBL)-induced ulcer bleeding is a known serious complication of banding, with a prevalence of 2.8%–15% and a mortality rate up to 52% [1–3]. Treatment options are limited. Several modalities have been reported including EVBL, cyanoacrylate injection, argon plasma coagulation, Sengstaken–Blakemore tube, and hemostatic spray, with variable treatment success [2,4]. Herein, we present a case using an over-the-scope clip (OTSC) as salvage therapy in a patient with refractory bleeding from EVBL-induced ulcer despite standard endoscopic treatment.

A 51-year-old man presented with esophageal variceal bleeding with hemorrhagic shock. He had a history of decompensated alcoholic cirrhosis (Child–Pugh Class B) and had undergone EVBL 3 weeks earlier for primary prophylaxis at an outside institution. Bleeding had persisted despite EVBL, selective angiogram with embolization, and transjugular intrahepatic portosystemic shunt. He was transferred to our hospital with an esophageal balloon tamponade tube. Upon arrival at our intensive care unit, the balloon tamponade tube was removed and upper endoscopy showed a large amount of blood clot in the esophagus, three columns of small esophageal varices, and multiple band ulcers from prior EVBL in the distal esophagus. There was a visible vessel at one of the band ulcers, which was thought to be the source of bleeding (► **Fig. 1**). A 12-mm OTSC (Ovesco Endoscopy AG, Tübingen, Germany) was mounted onto the gastroscope and deployed at the visible vessel, resulting in hemostasis (► **Fig. 2**, ► **Video 1**). He had no recurrent bleeding over a 4-month follow-up period.

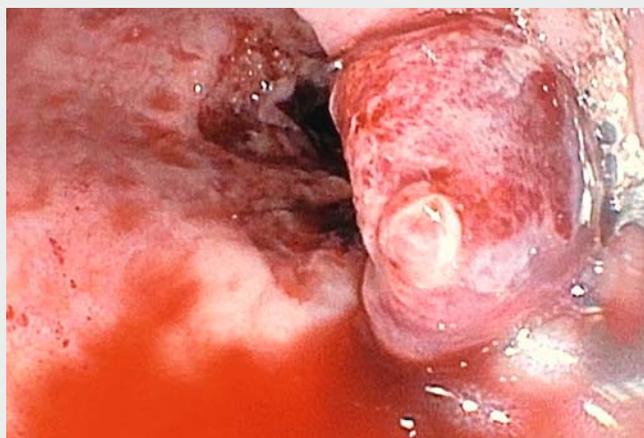
In conclusion, OTSC for the management of recalcitrant EVBL-induced ulcer bleeding is effective and may be considered as salvage therapy for this fatal condition,



► **Fig. 1** Upper endoscopy showed a visible vessel at the base of the band ulcer.



► **Fig. 2** Upper endoscopy showed successful deployment of an over-the-scope clip at the lesion to achieve hemostasis.



► **Video 1** Over-the-scope clip placement for refractory bleeding from esophageal variceal band ligation-induced ulcer.



especially in cases where a target source of bleeding can be identified, such as a visible vessel of the band ulcer.

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### Competing interests

Dr. Ngamruengphong is a consultant for Boston Scientific.

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## Bibliography

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