




Over-the-Scope Clip Application for Duodenal Ulcer: Easier Said than Done

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A 35-year-old man presented with hematemesis and syncope for 1 day. He was hospitalized and immediately resuscitated with intravenous fluids. His investigation revealed hemoglobin of 5 g/dL and normal liver and renal function tests. After resuscitation with packed cell transfusion, gastroscopy was performed under conscious sedation, which revealed an ulcer (1 cm in size) (Forrest class IIA) with visible vessel on the anterior wall of duodenal bulb. Various options like injection (adrenaline), thermal coagulative therapy, and through-the-scope clips were considered; however, due to large ulcer size and fibrotic base, over-the-scope clip (OTSC; 12/6T, Ovesco Endoscopy AG, Tübingen, Germany) application was planned. Risk of rebleeding and failure of therapy were explained. OTSC clip was mounted on tip of gastroscope (GIF Q150, Olympus, Tokyo, Japan) and whole assembly was then passed across the postcricoid region with mild resistance (► **Video 1**). In stomach, while attempting to cross pylorus, Ovesco applicator cap with mounted clip got stuck at pylorus and detached from the scope; hence, the scope was withdrawn carefully after loosening thread from hand wheel. Gastroscope was passed again to retrieve the clip. Ovesco applicator cap with clip was grasped with rat tooth forceps and gradually pulled; however, on withdrawing from the postcricoid region, clip got dislodged and mal-deployed in the upper esophageal region accidentally. So, the scope was reinserted and the mal-deployed clip was removed with rat tooth forceps with sustained pressure. After removal, superficial submucosal injury was noted at the clip site. Pylorus was dilated using circumferential radial expansion balloon (CRE, Boston Scientific, Marlborough, Massachusetts, United States) up to 15 mm. Another OTSC (12/6T) was mounted on the gastroscope (GIF -1TQ160, Olympus, Tokyo, Japan) and scope was passed in duodenal bulb. With mild suction clip was applied over the ulcer site, and after application, complete grasping of ulcer within the clip was confirmed (► **Fig. 1A–F**). As the patient had upper esophageal submucosal injury, nasogastric (NG) tube was placed. Proton pump inhibitor

infusion was continued and gradually patient was started on NG feeding. There was no further drop in hemoglobin, and the patient was discharged after 72 hours of observation after removal of NG tube. OTSC is safe and effective modality as primary as well as rescue strategy for the peptic ulcer bleeding.^{1–3} This video demonstrates the problems encountered during OTSC application and their troubleshooting.

Video 1

Video demonstrating troubleshooting during OTSC application for duodenal ulcer bleeding. OTSC, over-the-scope clip. Online content including video sequences viewable at: <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0044-1788705>.

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Conflict of Interest

None declared.

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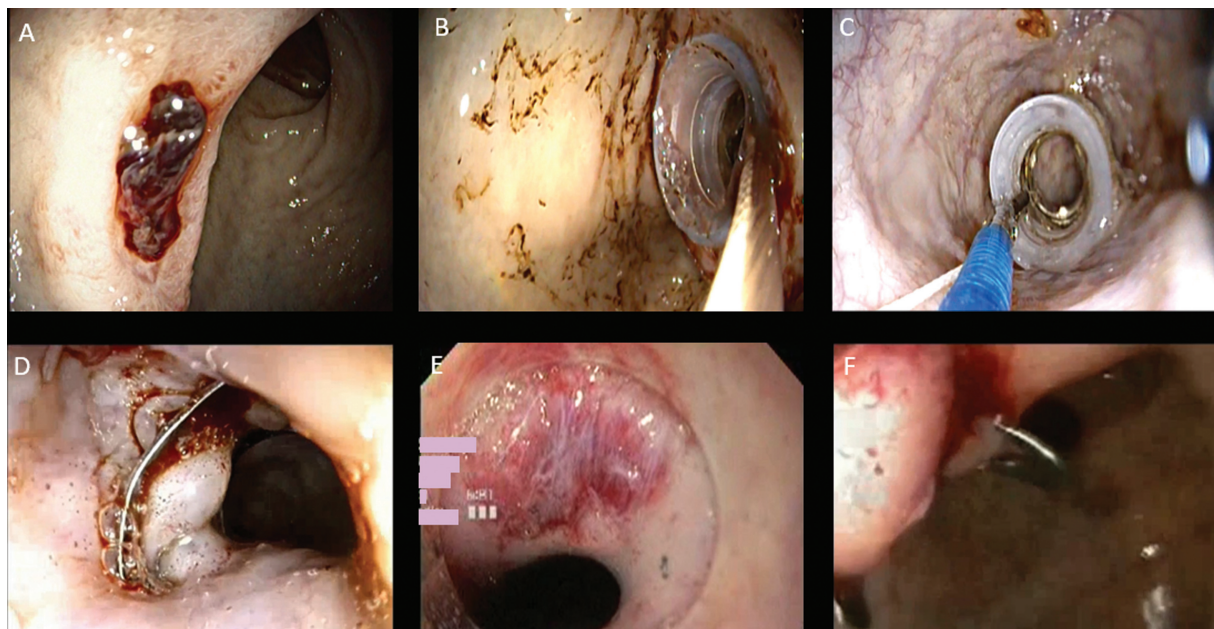


Fig. 1 (A–F) Hurdles during over-the-scope clip application. (A) Large ulcer with visible vessel seen on anterior wall of duodenal bulb. (B) Endoscopy image showing OTSC clip with cap wedged at the pylorus. (C) Endoscopy image showing OTSC clip retrieval with Rat tooth Forceps. (D) Endoscopy image showing mal-deployed clip in the upper esophageal wall. (E) After mal-deployed clip removal, superficial submucosal injury was noted. (F) After Endoscopy image showing successful OTSC clip application over duodenal ulcer site. OTSC, over-the-scope clip.