

Underwater endoscopic mucosal resection is very useful for treating multiple bleeding gastric polyps

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A 56-year-old woman was admitted with tarry stools and progressive anemia, with hemoglobin decreasing from 10.7 mg/dL to 6.7 mg/dL over 6 weeks.

Gastrointestinal endoscopy showed multiple gastric polyps, with bleeding on the greater curvature of the gastric body (Fig. 1A). Previous computed tomography and colonoscopy had excluded other causes of anemia. She was informed of the options of total gastrectomy and endoscopic resection of the polyps; she opted for the latter. Identification of bleeding polyps and direct observation of the stalks is difficult due to gravity. Underwater endoscopic mucosal resection (UEMR) has been recently reported to be effective in treating gastrointestinal polyps [1-3]; we speculated that it could address these problems. The stomach was filled with saline via the water-jet function of a single-channel endoscope (GIF-Q260J; Olympus, Tokyo, Japan); UEMR was performed with a 20-mm snare (Rotatable Snare; Boston Scientific, Marlborough, Massachusetts, USA) (Video 1). Floating their heads allowed the polyps to stand erect, facilitating visualization of their stalks (Fig. 1B,C). Water immersion also allowed easy identification of bleeding polyps owing to direct observation of blood flow (Fig. 1D); these were resected first. Overall, 65 polyps were resected without any adverse events. Defects were closed using clips to prevent postprocedural bleeding (Fig. 2). Pathological examination revealed fundic gland polyps and no malignancy. Hemoglobin levels remained unreduced at 1 year.

UEMR facilitates the identification of bleeding sites, visualization of polyp stalks, and clipping of defects in bleeding gastric polyps, and may become one of the interventional approaches in these cases.

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Conflict of Interest: None

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Received 10 September 2020; accepted 22 September 2020
published online 16 December 2020

DOI: <https://doi.org/10.20524/aog.2020.0567>

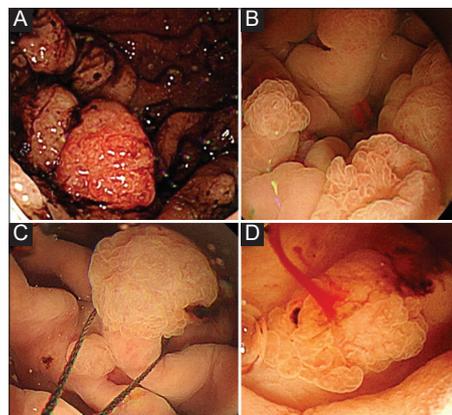


Figure 1 (A) Endoscopic view showing multiple gastric polyps with bleeding. At this point, it is difficult to identify bleeding polyps. (B) Floating and standing gastric polyps observed using the water immersion technique. (C) Underwater snaring is easy and reliable because of the improved visualization of the stalks of polyps. (D) Water immersion allowed to easy identification of bleeding gastric polyps because of the blood flow from the polyps

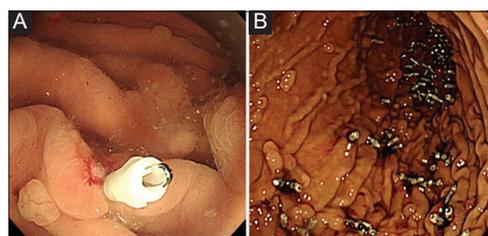


Figure 2 (A) Underwater clipping after endoscopic mucosal resection is an effective method to confirm whether hemostasis was achieved. (B) Clips were observed after underwater endoscopic mucosal resection

Video 1 This video shows underwater endoscopic mucosal resection of multiple bleeding gastric polyps. Using the underwater technique, we can facilitate the identification of bleeding sites, visualization of polyp stalks, and clipping of defects

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