Underwater EMR with submucosal lift for a small intestinal polyp in a patient with Peutz-Jeghers syndrome

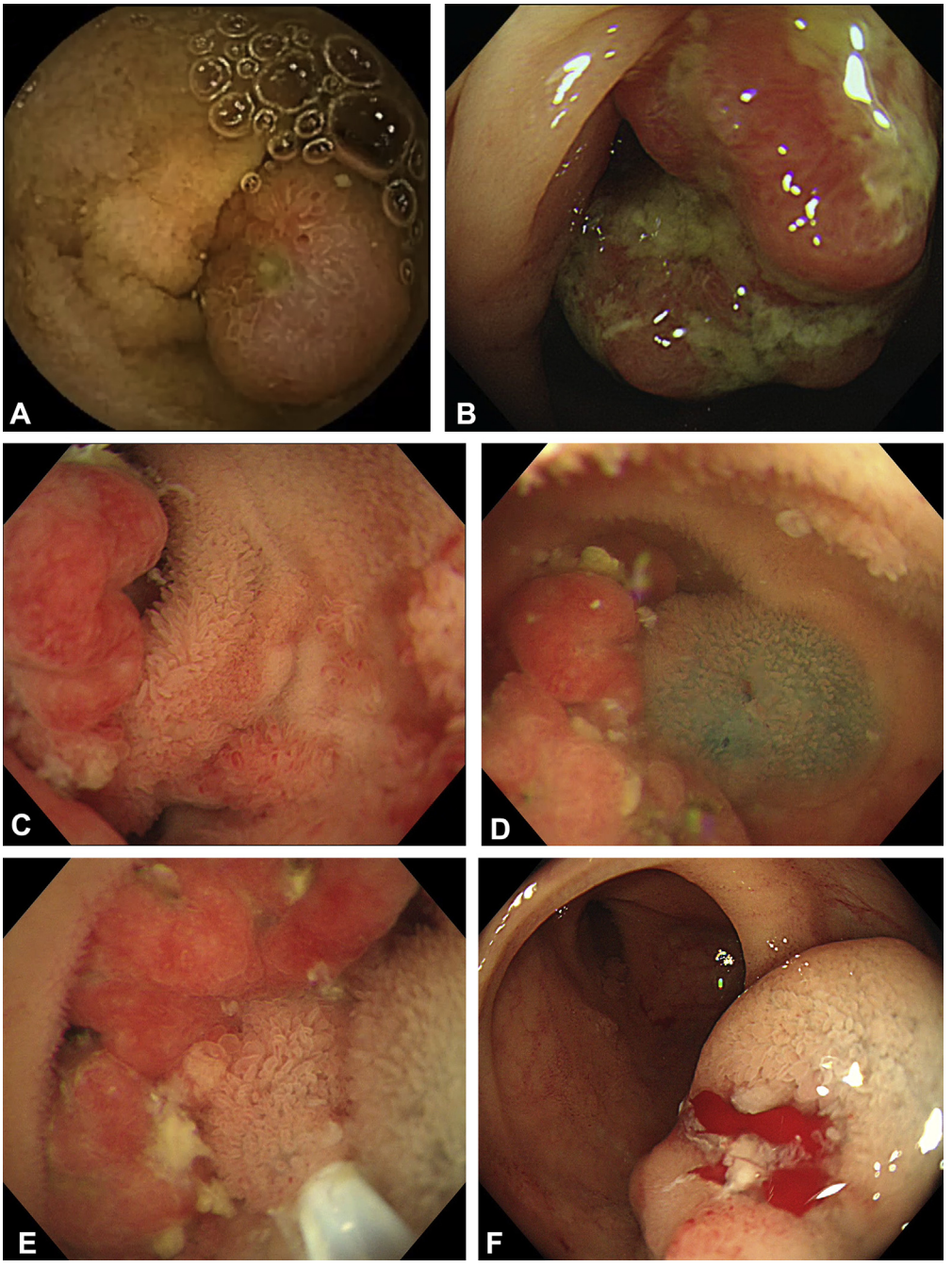

Figure 1. A, Capsule endoscopic view showing a reddish pedunculated polyp in the ileum, 25 mm in diameter. **B,** Underwater EMR for an ileal polyp. Good visualization was difficult because of the narrow lumen at the angle, and CO_2 insufflation was used. **C,** As the lumen filled with water the polyp head was propped up, and it became easier to maintain the operating space and identify the stalk. **D,** After injection, the stalk and its attachment were identified more clearly. **E, F,** En bloc resection using the underwater EMR technique was successful without any adverse events.

Written transcript of the video audio is available online at www.VideoGIE.org.

Underwater EMR is considered an alternative technique to standard polypectomy in the management of difficult cases. This method has been reported to be effective for treatment of duodenal and colonic polyps. However, the efficacy and safety of underwater EMR for small intestinal polyps are still unknown.

A 30-year-old woman with suspected Peutz-Jeghers syndrome was referred to our hospital for further examination and treatment. Capsule endoscopy showed a reddish polyp in the ileum (Fig. 1A). We performed underwater EMR. Water immersion facilitated propping up the polyp head and enabled us to see the base, allowing safe en bloc resection (Video 1, available online at www.VideoGIE.org).

The lesion was a pedunculated polyp, 25 mm in diameter. Because the lesion was close to the terminal ileum, we used a colonoscope. The colonoscope was inserted using CO_2 insufflation with the patient under conscious sedation. After reaching the lesion, we would have tried to resect it by conventional EMR, but it was very difficult to achieve a good view and access the base of the polyp because of the narrow lumen and acute angle. Therefore, we changed the plan to perform underwater EMR (Fig 1. B-F). All insufflated CO_2 was aspirated, and the lumen was filled with water with an infusion pump. As the lumen filled with water the polyp head was propped up, and it became easier to maintain the operating space and identify the stalk and its attachment clearly.

After injection of sodium hyaluronate into the submucosa to ensure further safety, we achieved en bloc resection with underwater EMR using a 27-mm snare, without any adverse events. The resected polyp was composed of a central core of smooth muscle that showed treelike branching and nonatypical hyperplastic mucosa. From these findings, the histopathologic diagnosis was a Peutz-Jeghers polyp. In our experience, underwater EMR of a small bowel polyp seems to be effective, safe, and well tolerated, particularly if access is difficult.

DISCLOSURE

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