A case of duodenal polyp at superior duodenal angle successfully treated by cap-assisted endoscopic mucosal resection

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Recent studies have demonstrated an increase in endoscopic treatments for duodenal polyps.[1,2] However, endoscopic treatment for duodenal polyps is technically challenging because of the high risk of severe adverse events, such as perforation and bleeding.[3] Most of the cases reported to date deal with polyps located in the first and second parts of the duodenum; there are few reports of treatment for duodenal polyps at the superior

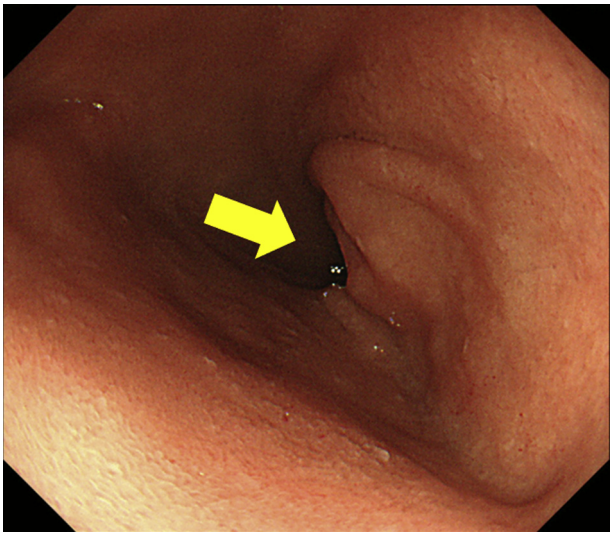

Figure 1. View of duodenal bulb. We could not see the polyp without a hood.

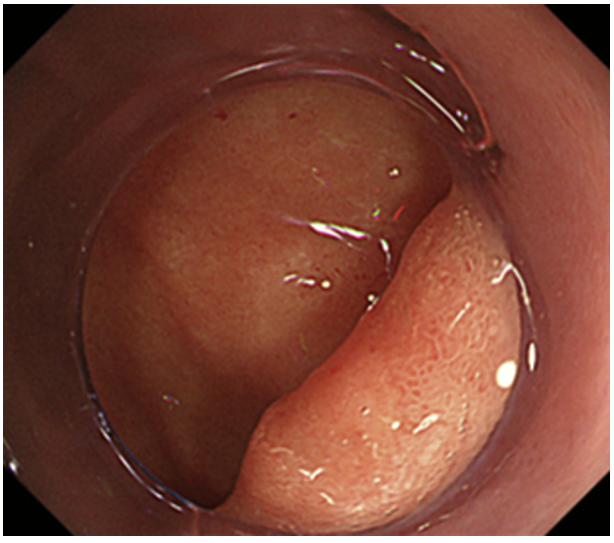

Figure 2. A normal transparent hood allowed us to observe a 15-mm, flat, elevated polyp outside the superior duodenal angle. However, the anal side of the polyp could not be clearly seen.

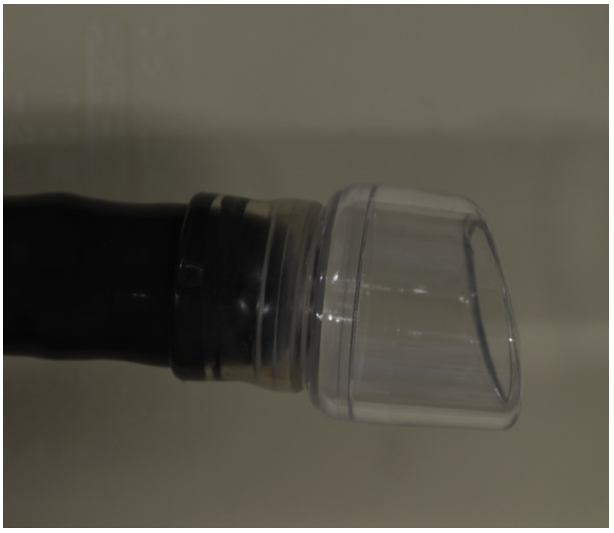

Figure 3. The standard oblique hood for endoscopic mucosal resection.

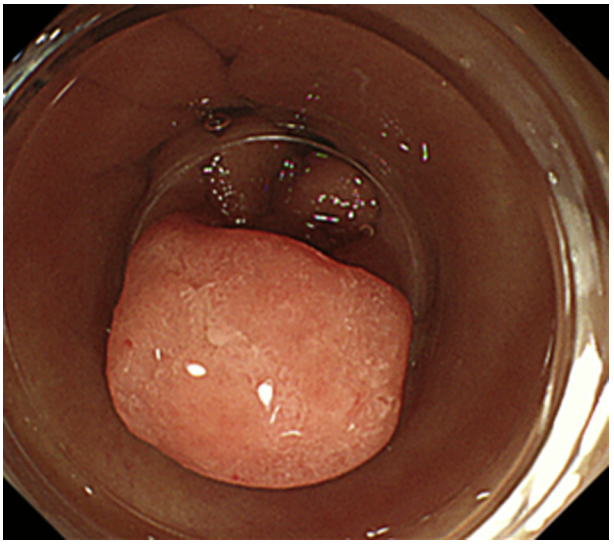

Figure 4. The polyp was suctioned into the hood, and the anal side of the polyp was clearly observed.

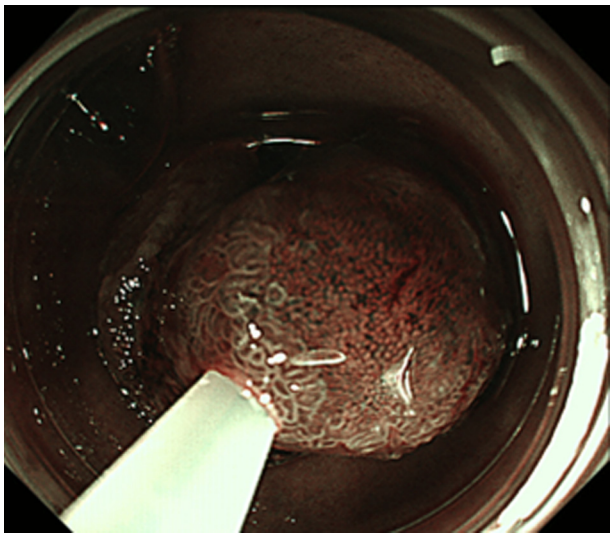

Figure 5. After suctioning, the polyp was strangulated by a snare.

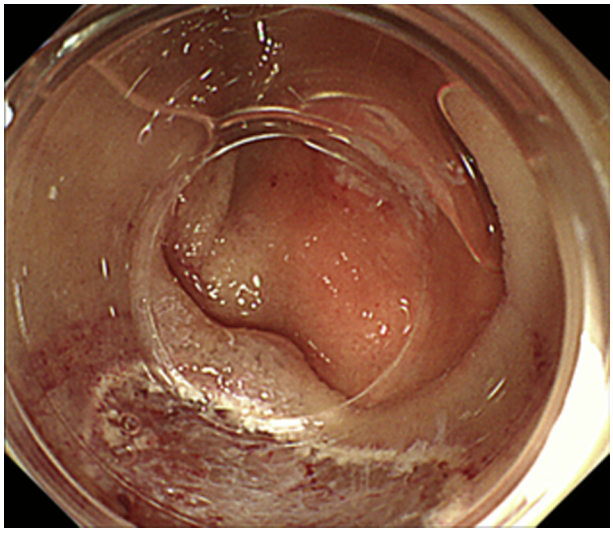

Figure 6. En bloc resection was performed.

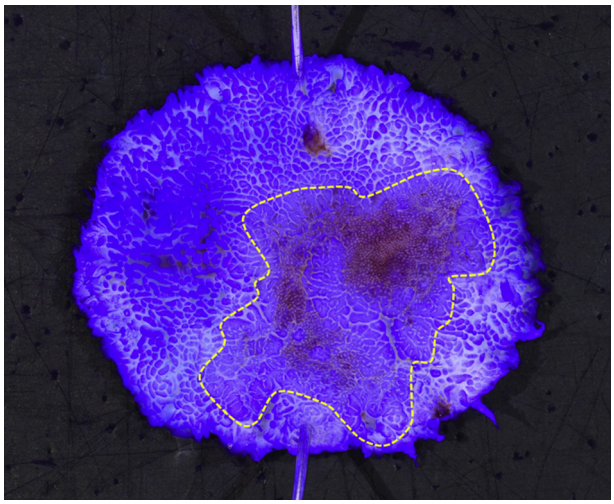

Figure 7. The resected specimen revealed that the horizontal margin of the polyp was negative.

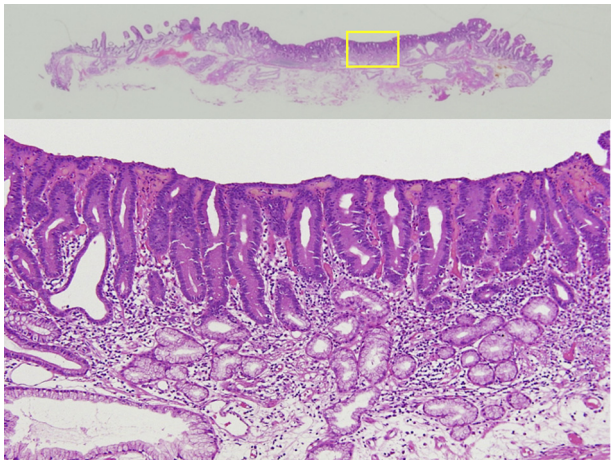

Figure 8. The pathologic diagnosis was tubular adenoma with free horizontal and vertical margins.

duodenal angle (SDA). Endoscopic observation and resection of duodenal polyps at the SDA are extremely difficult because of the anatomical complexity and poor maneuverability of the endoscope. This article describes a case of a duodenal polyp at the SDA, in which it was difficult to even confirm the presence of a polyp without a hood. The polyp was successfully treated with cap-assisted endoscopic mucosal resection (EMRC).

A 72-year-old woman was referred to our hospital for treatment of a duodenal polyp. We were initially unable to see the polyp without a hood (Fig. 1). A normal transparent hood allowed us to observe a 15-mm, flat, elevated polyp at the SDA (Fig. 2). However, the anal side of the polyp could not be clearly seen. Because technical difficulties and possible residual polyp after treatment were predicted with usual endoscopic mucosal resection or endoscopic submucosal dissection, we decided to perform EMRC (Video 1, available online at www.VideoGIE.org).

A specialized transparent hood for EMRC (D-206; Olympus Optical Co Ltd, Tokyo, Japan) was mounted on the tip of the endoscope (Fig. 3). The anal side of the polyp could be clearly seen because of the characteristic form of the hood. After submucosal injection of 0.4% sodium hyaluronate, a crescent-shaped snare (SD-221L-25; Olympus Optical Co Ltd) was opened inside the hood and fitted at the tip of the hood. With suction, the whole polyp entered the hood completely (Fig. 4). The polyp was strangulated by the snare and resected en bloc in less than 10 minutes (Figs. 5 and 6). The electrocautery settings were as follows: Endo-cut Q mode, effect 3, duration 2, and interval 4 (VIO 300 D; ERBE Elektromedizin, Tübingen, Germany). Clip closure was performed for the ulcer.

The pathologic diagnosis was tubular adenoma with free horizontal and vertical margins (Figs. 7 and 8).

In this study, we were able to safely treat a duodenal polyp by EMRC. The hood used for EMRC is widened on the outside and has outer and inner diameters of 18.1 and 10 mm, respectively. This enables full opening of the snare within the hood and increases the resected area. In addition, the hood facilitates easier recognition of the lesion margins and ensures negative horizontal margins.

Recently, the safety and efficacy of cold polypectomy for duodenal polyps have been reported.[4] However, in this case, simple cold polypectomy was not possible because of the complex location of the lesion. In addition, long-term follow-up data for cold polypectomy remain unclear. Therefore, we selected EMRC.

In conclusion, we believe that EMRC is a safe and effective treatment for small duodenal polyps (<15 mm in diameter) that are technically difficult to treat by usual endoscopic mucosal resection or endoscopic submucosal dissection because of the polyp location.

DISCLOSURE

All authors disclosed no financial relationships.

Abbreviations: EMRC, endoscopic mucosal resection; SDA, superior duodenal angle.

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https://doi.org/10.1016/j.vgie.2020.07.019