Cold snare piecemeal endoscopic mucosal resection of a very large duodenal adenoma

An 83-year-old woman was referred for the management of an incidentally found large duodenal polyp. The polyp was biopsied by the referring physician and was found to be a tubulovillous adenoma. The patient was scheduled for esophagogastroduodenoscopy with endoscopic mucosal resection (EMR).

The procedure was performed under general anesthesia, using a therapeutic upper endoscope and duodenoscope. A 6-cm polyp was visualized in the second part of the duodenum (Fig. 1), 1 cm proximal to the major papilla. The polyp involved 60% of the luminal circumference. No depressed or ulcerated areas were noted upon examination with high-definition white-light and narrow-band imaging. The polyp was injected submucosally with a 1:200,000 solution of epinephrine in saline and methylene blue (Fig. 2). Piecemeal cold snare EMR was performed using a 9-mm cold snare (Exacto; US Endoscopy, Mentor, Ohio, USA). The total procedure time was 2 hours 30 minutes; an advanced endoscopy fellow assisted with the procedure, resulting in a somewhat extended procedure time. The entire polyp was removed (Fig. 3), and resected fragments were suctioned through the endoscope channel and retrieved completely. Minimal self-limited oozing was noted from the resection site, but did not require any treatment.

The patient recovered well following the procedure, without any complications. Pathology showed a tubulovillous adenoma without high grade dysplasia. The patient returned for surveillance 3 months later. During surveillance endoscopy, a 12-mm residual polyp was noted, which was resected using piecemeal cold snare resection, with good results (Fig. 4).

This case demonstrates the successful use of a cold snare piecemeal EMR technique for a large periampullary duodenal adenoma/polyp. This technique is well...
described for large colon polyps where it has been found to have extremely low complication rates [1]. In contrast, high complication rates have been reported for hot snare EMR of duodenal polyps [2]. The cold snare technique could be considered preferentially for the resection of large duodenal polyps in order to minimize complication rates.

Competing interests

None

References