

Cap-assisted endoscopic mucosal resection of a large flat colorectal lesion



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Standard EMR techniques may not allow a complete resection of large lesions located in difficult places like the rectosigmoid junction. The advantages of cap-assisted EMR are better visualization of the operative field and the possibility to resect lesions irrespective of their locations.^{1,2}

We performed cap-assisted EMR of a laterally spreading tumor granular type (Paris classification 0-IIa+Is, Kudo pit pattern IV, 60 mm in size) involving the proximal rectum and the rectosigmoid junction in a 40-year-old woman (Fig. 1) (Video 1, available online at www.VideoGIE.org). The patient underwent colonoscopy because of abdominal pain. The cap-assisted EMR was uneventful, and intraprocedural bleeding was successfully treated by the application of endoclips. The patient was discharged

48 hours later. Histologic assessment showed a villous adenoma with high-grade dysplasia. Endoscopic follow-up at 8 months showed no recurrence. Cap-assisted EMR has been introduced primarily to treat lesions of the upper GI tract. The use of this procedure in the colon is still controversial because of the theoretic risk of entrapping the muscularis propria in the snare, causing perforation. To avoid this adverse event we suggest these measures:

- Injection of a large amount of fluid in the submucosa before EMR to prevent thermal damage of the muscularis propria.
- Performance of “controlled suction,” avoiding continuous suction, with filling of the cap. Sometimes the simple pressure of the cap against the lesion causes its protrusion into it.

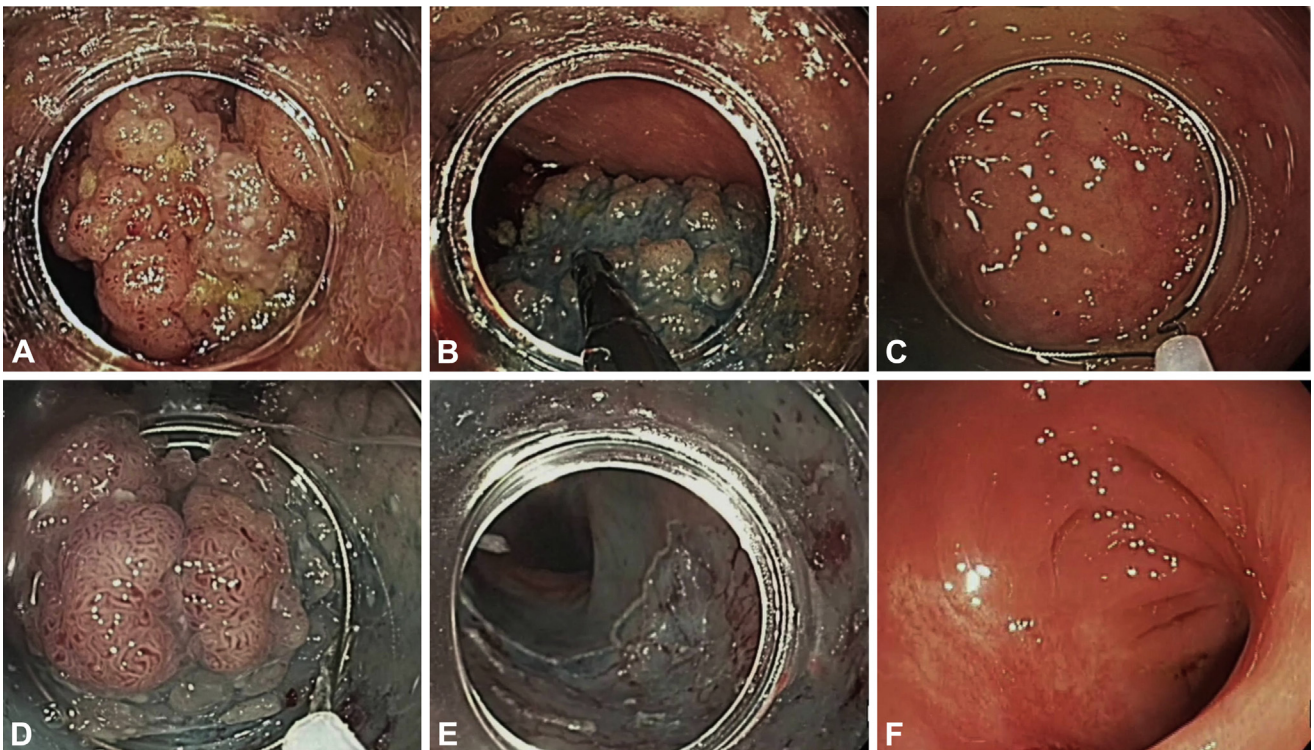


Figure 1. **A**, Laterally spreading tumor granular type (Paris classification 0-IIa+Is). **B**, Submucosal injection. **C**, The cap is on the tip of the colonoscope, and the monofilament polypectomy snare is placed into the gutter. **D**, The lesion is grasped with the polypectomy snare. **E**, After complete removal of the lesion. **F**, After 8 months.

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

In our experience, cap-assisted EMR is effective for the removal of large laterally spreading tumors, avoiding surgical resection in an ever-increasing number of patients; the residual neoplasia rate has been 4%.³ However, this procedure should be carried out at referral centers with experienced endoscopists to reduce the risk of adverse events.^{1,4}

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

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