



A simple and cost-effective method: piecemeal cold snare polypectomy without injection for a large sessile serrated lesion ≥ 20 mm

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Cold snare polypectomy (CSP) has become a common treatment for small polyps, but a size limitation exists because some lesions are insufficient for precise histologic examinations. If the lesion measures 10 mm or more, its possibility of having malignant potential increases¹; this is the reason why the limitation exists for CSP.² Although sessile serrated lesions (SSLs) are important precursors of colorectal cancer, it is not known whether treatment is safer and more effective particularly for large SSLs (≥ 10 mm). As is already known, an SSL has a low risk of containing a malignant component even when it exceeds 10 mm.³ The duration of CSP without injection is short compared with the duration of endoscopic submucosal dissection of larger SSLs. Furthermore, the duration of CSP procedures is shorter than that of EMR, which requires injection and clipping after resection. A large SSL (≥ 20 mm), which could be a good candidate for CSP, has the disadvantage of precise histopathologic evaluation quality.

Regarding lesions exceeding 10 mm, Tutticci and Hewett⁴ reported on use of the piecemeal cold snare EMR technique. The technique requires 2 steps: repeated

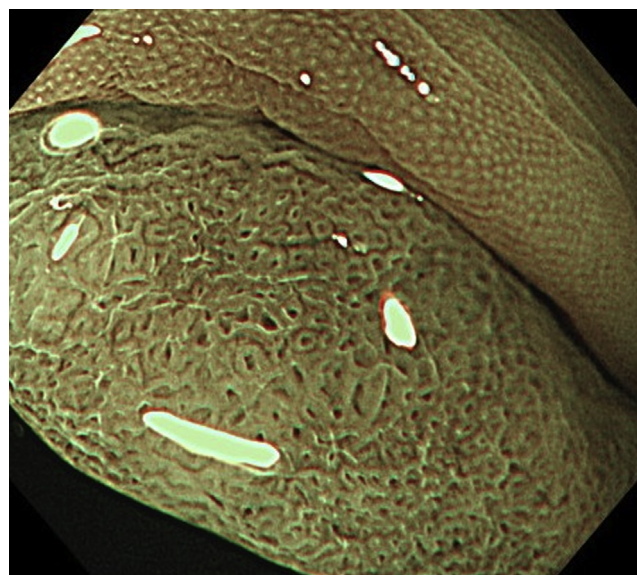


Figure 2. No vessels, and the regular white spot distribution is seen with magnifying narrow-band imaging.



Figure 1. Endoscopic findings and treatment and pathology. A flat, elevated, 25-mm lesion was located in the ascending colon.



Figure 3. The first snaring without injection using a 10-mm oval snare.

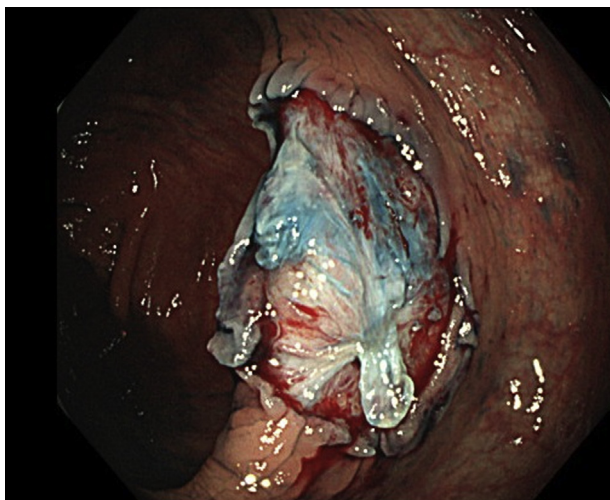


Figure 4. The second snaring without injection using a 10-mm oval snare.

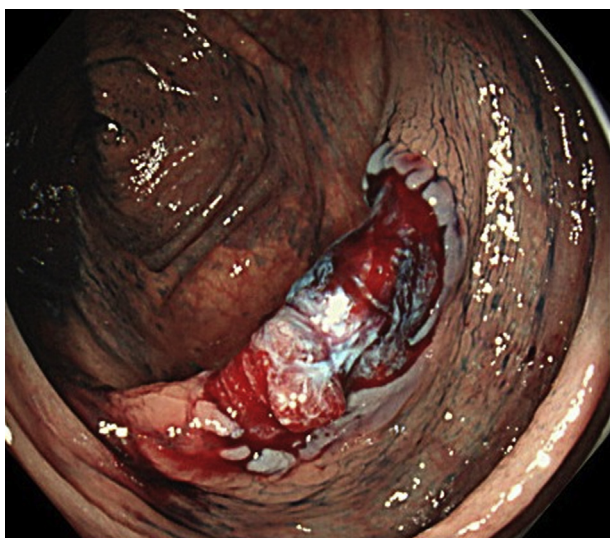


Figure 5. Complete resection was archived with 3-time piecemeal resection.

injection and cold snaring. This study reported 3 benefits of submucosal injection. First, submucosal injection expands the submucosal space, making tissue transection easier. Second, submucosal injection makes the margins of the lesion easier to detect. Finally, submucosal injection can reduce immediate postpolypectomy bleeding by a direct tamponade effect. However, we believed we can safely and effectively perform CSP for large SSLs without injection, so we performed a simple, 1-step method: piecemeal CSP without injection. With no need for an injection needle (NeedleMaster; Olympus, Tokyo, Japan; \$50 U.S.), this method is more cost-effective compared with piecemeal cold snare EMR.

The process of piecemeal CSP without injection is shown in [Figure 1](#) and [Video 1](#) (available online at www.VideoGIE.org). Colonoscopy revealed a flat, folded-over,

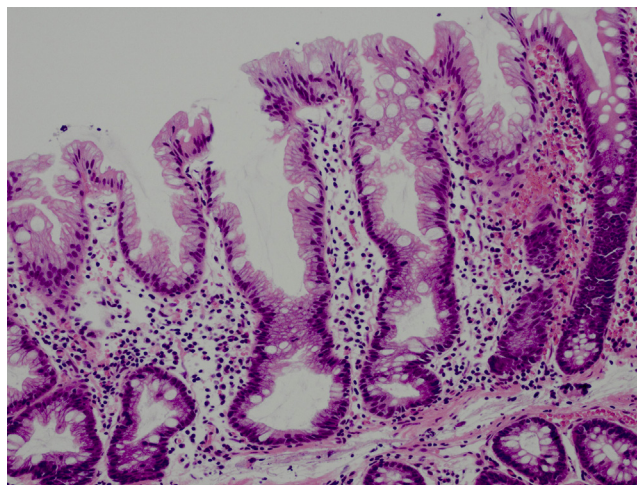


Figure 6. All of the lesions were pathologically diagnosed as sessile serrated lesions without dysplasia.

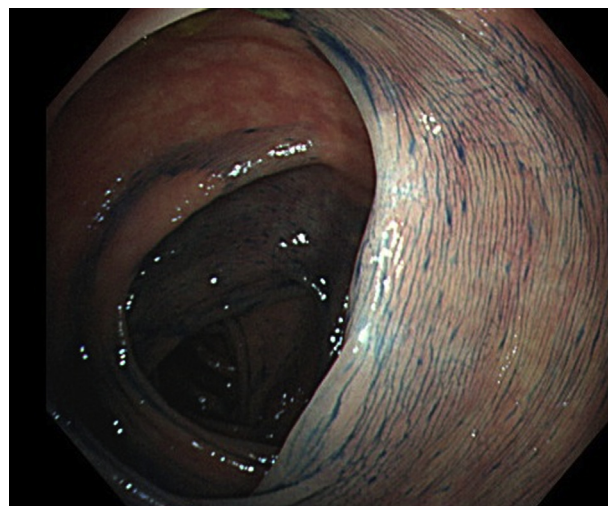


Figure 7. Follow-up colonoscopy after 6 months revealed no residual or recurrent serrated tissue.

25-mm lesion covered with rich mucus in the ascending colon. Magnifying narrow-band imaging showed Japan narrow-band imaging Expert Team classification type A around the whole surface of the lesion⁵ ([Figs. 1 and 2](#)). We diagnosed the lesion as SSL without dysplasia. A 10-mm oval type snare (SnareMaster Plus; Olympus, Tokyo, Japan) was used, and the near side of the lesion was tied and cut without electric current. The same process was repeated in the foreground to background. In total, 3 piecemeal resections were done, and endoscopic complete resection was archived without any adverse events ([Figs. 3-5](#) and [Video 1](#)). We sampled 4 margins of the defect using biopsy forceps. Histopathologic examination showed SSL without dysplasia, and biopsy results were negative ([Fig. 6](#)).

As shown in the present video, piecemeal CSP without injection can be performed easily and at little cost. In

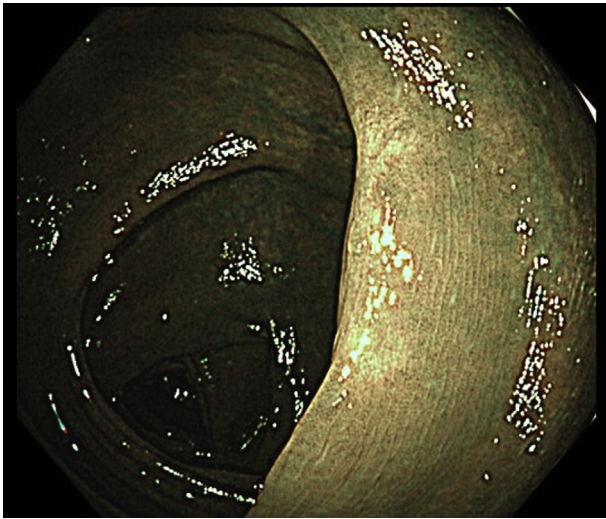


Figure 8. Follow-up colonoscopy after 6 months revealed no residual or recurrent serrated tissue with narrow-band imaging.

conclusion, we propose that piecemeal CSP without injection is a simple and economic method for resecting a large SSL (≥ 20 mm) (Figs. 7 and 8).

DISCLOSURE

All authors disclosed no financial relationships.

Abbreviations: CSP, cold snare polypectomy; SSL, sessile serrated lesion.

REFERENCES

1. Bretagne JF, Manfredi S, Piette C, et al. Yield of high-grade dysplasia based on polyp size detected at colonoscopy: a series of 2295 examinations following a positive fecal occult blood test in a population-based study. *Dis Colon Rectum* 2010;53:339-45.
2. Ferlitsch M, Moss A, Hassan C, et al. Colorectal polypectomy and endoscopic mucosal resection (EMR): European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2017;49:270-97.
3. Burgess NG, Pellise M, Nanda KS, et al. Clinical and endoscopic predictors of cytological dysplasia or cancer in a prospective multicentre study of large sessile serrated adenomas/polyps. *Gut* 2016;65:437-46.
4. Tutticci NJ, Hewett DG. Cold EMR of large sessile serrated polyps at colonoscopy (with video). *Gastrointest Endosc* 2018;87:837-42.
5. Sano Y, Tanaka S, Kudo SE, et al. Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI Expert Team. *Dig Endosc* 2016;28:526-33.

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