Optimizing resection of sessile serrated polyps

Removal of precancerous lesions during colonoscopy reduces colorectal cancer (CRC) incidence and mortality [1]. Recent data have highlighted that interval CRC occurs despite previous colonoscopy. Incomplete removal of polyps is one of the factors leading to interval CRCs [2]. Incomplete polypectomy of sessile serrated polyps (SSPs) is four-fold higher than that of conventional adenomas [3] and may contribute to a higher risk of interval CRCs.

Most SSPs are smaller than 2 cm (average size, 5–7 mm) [4] and can be removed safely and effectively at the time of routine colonoscopy. Optimal polypectomy technique varies depending on the individual characteristics of the polyp. SSPs often have a sessile or flat morphology with indistinct borders [5], which can make them more susceptible to incomplete removal. In light of the data showing an inordinately high incomplete polypectomy rate for SSPs, it is critically important for endoscopists to improve on the method of SSP removal.

We approach removal of suspected flat SSPs by using submucosal injection of dilute methylene blue with saline followed by snare electrocautery (● Figs. 1, 2, 3). This technique provides both better visualization of the polyp borders and better positioning of the polypectomy snare to ensure complete resection. We believe this technique optimizes complete resection of flat SSPs, with the aim of reducing interval cancers. Further studies are needed to prove that the endoscopic and histologic recurrences are low and that a long-term reduction of interval cancers can be achieved using this technique.

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Competing interests: None

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Fig. 1 Endoscopic white light view of 1-cm, flat, subtle sessile serrated polyp (SSP) with indistinct edges in ascending colon.

Fig. 2 Endoscopic view of SSP after submucosal injection of dilute methylene blue with normal saline. The edges of the SSP are now more clearly defined, allowing proper placement of the polypectomy snare.

Fig. 3 Endoscopic view showing complete resection of the SSP with methylene-blue-stained muscularis propria.