

Do we need to take care of nodular scar following gastric ESD?



Authors

Motohiko Kato, Naohisa Yahagi

Institution

Division of Research and Development for Minimally Invasive Treatment, Cancer Center, Keio University School of Medicine, Tokyo, Japan

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Corresponding author

Motohiko Kato, MD, PhD, Keio University School of Medicine – Cancer Center, 35 Shinanomachi, Shinjuku-ku Tokyo – Select One – 160-8582, Japan
Fax: +81-3-3353-6247
moto28hiko@icloud.com

Piecemeal resection and a positive or unclear horizontal margin is known to be associated with risk of local recurrence. Incidence rate of local residual recurrence after incomplete endoscopic resection is reported to be more than 20% to 30% [1, 2]. Endoscopic submucosal dissection (ESD) achieves en bloc resection and R0 resection in over 90% of cases [3,4]. This high success rate contributes to a significant reduction in local residual recurrence. In fact, incidence rate of local recurrence after curative resection is reportedly extremely low [1,5,6]. On the other hand, we sometimes encounter polypoid nodules on the ESD scar even though pathological findings show the initial ESD resulted in complete resection.

In this issue of Endoscopy International Open, Arantes et al. demonstrated the results of a multicenter retrospective study of polypoid nodule scars (PNSs) after gastric ESD. They analyzed a total of 2275 curative gastric ESD cases from 5 referral centers and found that incidence of PNS was 1.2% (3.1% in the distal stomach), all cases of PNS arose from the distal stomach, and approximately 20% of PNS disappeared during follow-up. Based on these results, they concluded that PNS is a benign alteration of wound healing and does not require any intervention other than endoscopic surveillance.

ESD as a salvage treatment for local residual recurrence after endoscopic treatment is a technically difficult procedure due to the severe fibrosis in the submucosal layer from the wound healing process. In addition, there is no space to dissect, particularly after ESD in cases in which the dissection layer is just above the muscularis propria. Severe fibrosis results in poor visualization of the submucosal layer and increased difficulty in identification of the dissecting plane; thus, ESD is associated with an increased risk of perforation and incomplete resection

due to injury of the specimen. Considering the difficulty of ESC, a precise diagnosis to differentiate between PNS and true local recurrence is important.

The precise reason PNS predominantly arises from the distal stomach is unknown. The gastric antrum is a site of predilection for inflammatory fibroid polyps, which are non-neoplastic cellular proliferations composed of fibroblasts, blood vessels, and inflammatory cells [7]. This observation suggests the inflammatory reaction and wound healing process could alternate between the antrum and the fundus/body. Differences in the properties of gastric peristalsis, the degree of bile reflux, and the thickness of the submucosal layer according to the location would play a role in developing PNS.

Conclusion

In conclusion, to avoid an unnecessary salvage ESD, we should consider PNS, a non-neoplastic change, as a possibility, especially when we find a polypoid change on the ESD scar in the distal stomach.

Competing interests

None

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