ESD for Barrett Esophageal Cancer

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Introduction

The incidence of Barrett’s esophageal cancer is one of the most rapidly increasing among all cancers in the West, and it is also expected to increase in the East. The optimal treatment for superficial Barrett’s esophageal cancer remains controversial. So far, esophagectomy with regional lymph node dissection has been regarded as the standard treatment for superficial Barrett’s esophageal cancer.

Main body

Endoscopic therapies are currently being investigated as alternatives to esophagectomy because they can provide the least post-operative morbidity and the best quality of life. Endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) can remove visible lesions and permits histological evaluation of the resected tissue, which allows us to make diagnosis of tumor (T-) staging of the lesion. One of the limitations of EMR is the fact that resection size is restricted by the size of a snare, thus large lesions must be removed in several fragments. Piecemeal resection of lesions can be associated with local recurrence, probably because of minor remnants of neoplastic tissue being left in situ. ESD enables removal of larger specimens than EMR in patients with superficial Barrett’s neoplasia. This in turn allows us for more precise histological analysis and higher en bloc resection rates than EMR that potentially reduce the incidence of recurrence. Detailed endoscopic examination to determine the invasion depth and extent of Barrett’s esophageal neoplasia is mandatory before ESD. The initial inspection is usually conducted with white-light imaging followed by narrow-band imaging. The ESD procedure is similar to that for lesions in other parts of the digestive tract. However, the narrow space of the esophagogastric junction and contraction of the lower esophageal sphincter sometimes disturb the visual field and endoscopic control. Skilled endoscope handling, sometimes including retroflexion, is required during ESD for Barrett’s esophageal cancer.

Conclusion

ESD shows promising short-term results for superficial Barrett’s esophageal cancer. A further long-term, large-scale study is required for evaluation of outcome of ESD for Barrett’s esophageal cancer.