sparing techniques, whereas those with the presence of submucosal invasion and poor differentiation are higher-risk tumors. With a closer examination, we found that submucosal esophageal cancer (pT1b) with deep submucosal invasion (SM3) and possibly lymphovascular invasion predicted regional lymph node metastases.³ As such, these patients are generally not good candidates for esophageal preservation and better suited for resection. Although endoscopic therapies are on the rise, there is still a paucity of data on the true risk of many of these “superficial cancers.”⁴ As an example, does a mucosal tumor with lymphovascular invasion have a lower risk of recurrence than SM1 cancer that is well differentiated?

Given the high morbidity of an esophagectomy, the treatment of esophageal cancers is a risky business. In this regard, endoscopic therapies reduce the risk of treatment-

related morbidity in low-risk cancers. However, we must always bear in mind the risk of death posed by this aggressive disease to our patients. As such, a radical resection may be the less-risky option in the long term in high-risk cancers!

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Commentary: Defining low-risk lesions for esophageal preservation informed by resecting the organ

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Over 20 years ago, the first reports of endoscopic mucosal resection (EMR) for mucosal-based esophageal cancers appeared in the gastrointestinal literature¹ and shortly after in the thoracic surgery literature.² This initiated a paradigm shift in how early esophageal adenocarcinomas, particularly T1a tumors, were being managed. Endoscopic eradication therapy, mucosal resection to remove the cancerous lesion, and radiofrequency ablation³ to eradicate the precursor lesion—Barrett’s esophagus—has emerged as an

Esophagectomy specimen with early Barrett’s cancer (pT1b) highlighted by arrow.

CENTRAL MESSAGE

Esophageal preservation for early Barrett’s cancers requires knowledge of risk factors for recurrence to select appropriate patients. This knowledge often comes from analysis of resected specimens.

important treatment strategy that allows for organ preservation in patients with Barrett’s-related early cancers.

The work by Sihag and colleagues⁴ is one of many in which surgeons through analysis of resected esophageal specimens have sought to inform our treatment of Barrett’s-related cancer. Early in the development of organ-

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preserving therapy, surgical studies showed that mucosal lesions carried a very low but not zero risk of metastases and that the submucosal plane provided a conduit to increasing nodal metastases the deeper the cancer invades.⁵⁻⁷ This cements current recommendations to offer esophagectomy to T1b cancers, but as endoscopists seek to push the boundaries of endoscopic therapy to include T1b, there is a need to further refine these data by identifying risk factors from resected esophagectomy specimens that might help decide between endoscopic eradication therapy and esophagectomy.

Single-arm series from our gastrointestinal colleagues have consistently demonstrated that endoscopic eradication therapy is favorable when lymphovascular invasion is absent, tumor differentiation is well or moderate, and depth of invasion is mucosal or <500 microns into the submucosa.⁸ These factors were supported in a small multi-institutional series of patients undergoing EMR and surgical resection with increasing nodal metastases when all 3 risk factors are present.⁹ The current work also supports the absence of lymphovascular invasion and adds in tumor length (<1.7 cm) as pretherapy factors associated with a low risk of recurrence. However, unlike studies of EMR specimens, their study did not identify the degree of differentiation or depth of invasion as key selection criteria for using EMR as part of organ preservation. It is apparent that continued analysis of surgical and endoscopic

specimens is needed to further refine criteria that allow physicians to decide between organ preservation or resection, particularly in cT1b esophageal cancer.

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