RESEARCH HIGHLIGHTS

ENDOSCOPY Safety and efficacy of colorectal endoscopic submucosal dissection

Endoscopic submucosal dissection (ESD) is a safe and very effective alternative to surgery for the treatment of colorectal tumors, reports a new study from Japan.

Surgery has been the only available treatment for colorectal tumors for a number of years. ESD, a minimally invasive modality that facilitates the one-piece resection of large superficial tumors, is an accepted treatment for gastric tumors, but hasn't been widely used for colorectal tumors. The lack of use of this technique in the colorectal setting is attributed to technical difficulty and concerns about an increased risk of perforation and resultant peritonitis. Small studies have previously examined the efficacy of ESD in this setting, but such studies have included limited numbers of patients, have involved single centers and assessed single operators.

Yutaka Saito and colleagues' large, prospective, multicenter study analyzed the clinical results of 1,111 ESDs performed in 1,090 consecutive patients at 10 institutions between June 1998 and February 2008. Participating centers were categorized according to experience: <50 procedures; 50–100 procedures; and ≥100 procedures. En bloc resection was achieved in 88% of patients and curative resection was achieved in 89%. Reported complications were perforation (4.9%), delayed perforation (0.4%) and postoperative bleeding (1.5%). No



procedure-related mortalities occurred. Large tumor size (≥50 mm) was shown to be an independent risk factor for the development of complications. However, risk of complications was shown to be significantly decreased as the number of ESDs performed at each institution increased.

"This study is particularly important because [it was] performed at a time when the use of coloretal ESD is spreading in Japan and a number of trained endoscopists are starting to perform colorectal ESDs in other countries as well," explains Saito. The authors conclude that these data support the use of ESD in experienced hands for the treatment of colorectal tumors. Future research efforts should expland on this work by obtaining longterm outcome data on patients treated with ESD and validating current findings in further multicenter, prospective cohorts with clearly defined eligibility criteria.

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Original article Saito, Y. *et al.* A prospectively study of 1111 colorectal endoscopic submucosal dissections (with video). *Gastrointest. Endosc.* doi:10.1016/j.gie.2010.08.004