EndoResect study: endoscopic full-thickness resection of gastric subepithelial tumors.

Abstract:
Endoscopic resection of gastric subepithelial tumors (SETs) carries a high risk of perforation. New techniques such as use of the over-the-scope clip (OTSC) may enable secure endoscopic closure of perforations. We aimed to evaluate the feasibility of endoscopic resection of small gastric SETs using a grasp-and-snare technique followed by OTSC closure of the gastric wall if necessary. In this prospective study 20 consecutive patients who presented with gastric SETs ≤ 3 cm were enrolled. Endoscopic resection was performed using a double-channel endoscope, a tissue anchor and a monofilament snare. If perforation occurred, the aim was to achieve complete closure with a tissue twin grasper and the OTSC. Procedures were performed under laparoscopic control using a 5-mm optic, which was introduced via a single 5-mm trocar through the umbilicus. All patients were followed up for 3 months after the procedure. In 6 /20 patients a pure endoscopic approach was impossible and a switch to laparoscopic wedge resection was necessary (large tumor size in 2 /6 patients; mainly extraluminal growth in 4 /6 patients). Solely endoscopic resection was successfully performed in the remaining 14 patients. Amongst these, laparoscopic control was impossible in two cases. Perforation occurred in 6 /14 patients but gastric closure with the OTSC was performed successfully in all these cases. No complications occurred and follow-up was
Endoscopic snare resection enables safe treatment of small gastric SETs (diameter<=3 cm) and seems faster and easier to perform than other endoscopic resection techniques, such as endoscopic submucosal dissection (ESD) or submucosal tunneling. Perforations occurring after full-thickness resection can be adequately managed by OTSC closure. Solely endoscopic resection without laparoscopic control seems possible in selected patients with tumors known to have purely intraluminal growth.