

Efficacy of the over-the-scope clip (OTSC) for treatment of colorectal postsurgical leaks and fistulas

Alberto Arezzo¹, Mauro Verra¹, Rossella Reddavid¹, Francesca Cravero¹, Marco Augusto Bonino¹ and Mario Morino¹

Digestive, Colorectal and Minimal Invasive Surgery, University of Turin, corso Dogliotti 14, 10126 Torino, Italy

Background

Colorectal postsurgical leaks and fistulas are severe complications that dramatically increase morbidity and mortality. The aim of this study was to evaluate the clinical impact of over-the-scope clip (OTSC) closure to seal the visceral wall in the management of acute and chronic colorectal postsurgical leaks and fistulas.

Methods

We reviewed our prospective series of acute and chronic colorectal postsurgical leaks and fistulas observed between April 2008 and September 2011 and treated by OTSC. Indications were all cases with an orifice <15 mm in maximum diameter with no extraluminal abscess and luminal stenosis.

Results

Endoscopic OTSC closure was performed in 14 consecutive patients (mean defect = 9.1 mm in diameter) by means of 10.5- or 12-mm clips, depending on the wall defect diameter. In eight cases, the indication was an acute leak and in six cases a chronic leak, mainly after anterior rectal resection; two cases were complicated by a rectovaginal fistula and in two other cases by a colocutaneous fistula. OTSC treatment was used to complete endoscopic vacuum-assisted closure of a large defect in three cases. The overall success rate was 86 % (12/14): 87 % (7/8) in acute and 83 % (5/6) in chronic cases. No OTSC-related complications occurred. Further surgery was required in one case.

Conclusion

Endoscopic OTSC closure of colorectal postsurgical leaks and fistulas is a safe technique, with a high success rate in both acute and chronic cases, including rectovaginal and colocutaneous fistulas.