Application of the Over-the-Scope-Clip in manifest GI-perforation:

30 days mortality, hospitalisation length and outcome in patients with and without successful perforation closure

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Introduction

Unintended GI-perforation may lead to escape of air, exsudation of gastric or intestinal secretion, bile or feces into the abdomen with induction of peritoneal inflammation, peritonitis and sepsis with fatal outcome.

The incidence of iatrogenic endoscopic perforations is reported between 0.1% – 0.4% for diagnostic endoscopies, and 0.4% – 5.0% for therapeutic endoscopies.

The application of the transmural Over-the-Scope-Clip (OTSC) may result in haemostasis, secure closure of perforations and its use has been described in emergency situations as well as in elective procedures:

- severe haemostasis
- spontaneous or iatrogenic perforation
- fistula closure
- closure of the resection site after transmural resection or in NOTES, and
- revisional endoscopy against weight gain after bariatric gastric bypass.

Methods

20 pts. confirmed/visible perforation

Endoscopy intended for perforation closure

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Results

20 pts. confirmed/visible perforation

Successfull closure of perforations using the OTSC

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Discussion & Conclusion

OTSC application in the emergency situation for 20 GI-perforations resulted in successful closure of 65%, while 35% remained and were worsened in 2 patients (10%).

5 of 7 patients with failed OTSC closure required immediate surgical repair.

Perforation size was significantly smaller (6mm) in OTSC+ patients than in OTSC- patients (12mm).

Characterization of GI-perforations for OTSC closure

Outcome of 20 patients with confirmed/visible gastrointestinal perforation treated by endoscopic OTSC application

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