Stent management of leaks after bariatric surgery: a systematic review and meta-analysis.

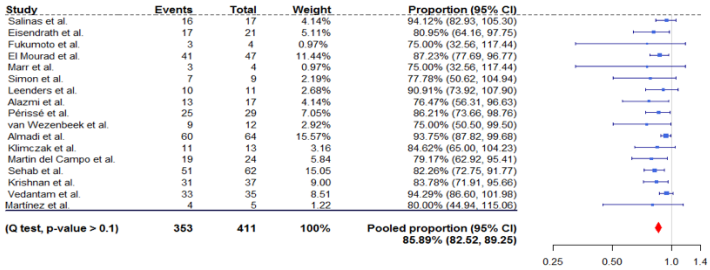
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Abstract

Background: Despite the low rates of complications of bariatric surgery, gastrointestinal leaks are major adverse events that increase post-operative morbidity and mortality. Endoscopic treatment using self-expanding stents has been used in the therapeutic management of these complications with preliminary good results. The aim of our study was to examine the safety and efficacy of the use of stents for the treatment of leakage after bariatric surgery. **Methods:** We performed a systematic review and meta-analysis of self-expanding stents placement for the management of gastrointestinal leaks after obesity surgery. Overall proportion of successful leak closure, stent migration and reoperation were analysed as primary outcomes. Secondary outcomes were patients' clinical characteristics, duration and type of stent, other stent complications, and mortality. **Results:** A meta-analysis of studies reporting stents (between 2005 and 2020) was performed, including 488 patients. The overall proportion of successful leak closure was 85.89 % (95% CI, 82.52-89.25%), median interval between stent placement and its removal of 44 days. Stent migration was noted in 18.65 % (95% CI, 14.32-22.98%) and the overall proportion of re-operation was in 13.54 % (95% CI, 9.94-17.14%). The agreement between reviewers for the collected data gave a Cohen's κ value of 1.0. No deaths were caused directly by complications with the stent placement. **Conclusion:** Self-expanding stents can be used for the management of gastrointestinal leaks after bariatric surgery with a high rate of effectiveness and a low mortality rates. Nevertheless, reintervention and stent migration represents a real problem with rates as high as 13.54% and 18.65 %, respectively. Therefore, more studies (probably, endoscopic combined methods) are still needed to establish a definitive basis for leak management after bariatric surgery and reduce migration rates.

Image



Recent Publications

1. Welbourn R, Hollyman M, Kinsman R, et al. Bariatric surgery worldwide: baseline demographic description and one-year outcomes from the fourth IFSO Global Registry Report 2018. Obes Surg. 2018.
2. Ng M, Fleming T, Robinson M, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the global burden of disease study 2013. Lancet. 2014;384:766–81.
3. The International Federation for the Surgery of Obesity and Metabolic Disorders. Fifth IFSO Global Registry Report. https://www.ifso.com/ifso-registry.php. Published 2019.
4. American Society for Metabolic and Bariatric Surgery. Estimate of bariatric surgery numbers—American Society for Metabolic and Bariatric Surgery. www.asmbs.org. https://asmbs.org/resources/ estimate-of-bariatric-surgery-numbers. Published 2018.
5. Rogalski P, Swidnicka-Siergiejko A, Wasielica-Berger J, Zienkiewicz D, Wieckowska B, Wroblewski E, Baniukiewicz A, Rogalska-Plonska M, Siergiejko G, Dabrowski A, Daniluk J. Endoscopic management of leaks and fistulas after bariatric surgery: a systematic review and meta-analysis. Surg Endosc. 2020 Feb 27.

Biography



Andreu Martínez Hernández *et al* have his expertise in evaluation and passion in improving the health and wellbeing. Their open and contextual systematic review based on responsive constructivists creates new pathways for improving healthcare. They reported the largest review of patients treated with stents for leak closure after bariatric surgery, focused on the most commonly used endoscopic therapy for leak closure after bariatric surgery, SEMS. They presented an important resource for the management of GI leaks after bariatric surgery with a high rate of effectiveness and a low mortality rates. This approach is responsive to all stakeholders and has a different way of focusing bariatric surgery complications.

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