Surgical Outcomes in Banded Vs. Non-Banded RYGB: a Systematic Review and Meta-Analysis

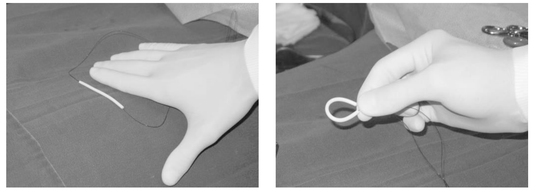
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Background

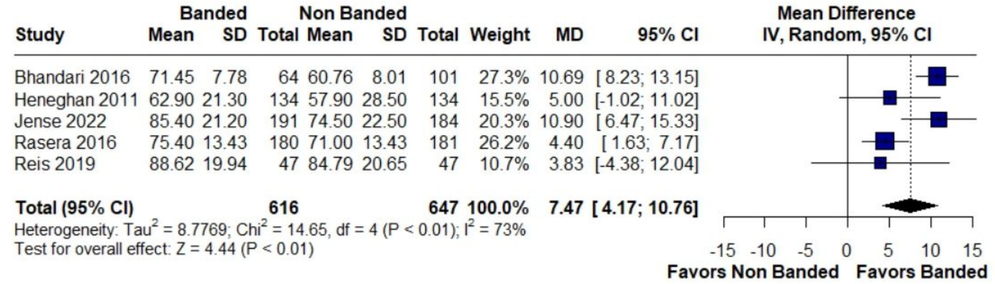
Obesity is a chronic and recurrent disease, and weight regain or inadequate weight loss can occur even after bariatric surgery. To enhance dietary restriction in Roux-en-Y gastric bypass (RYGB) procedures, the use of a Silastic ring or "banding" has been proposed. This systematic review evaluates the efficacy and safety of incorporating this device into RYGB procedures, addressing the limited data available on its impact.

Methods

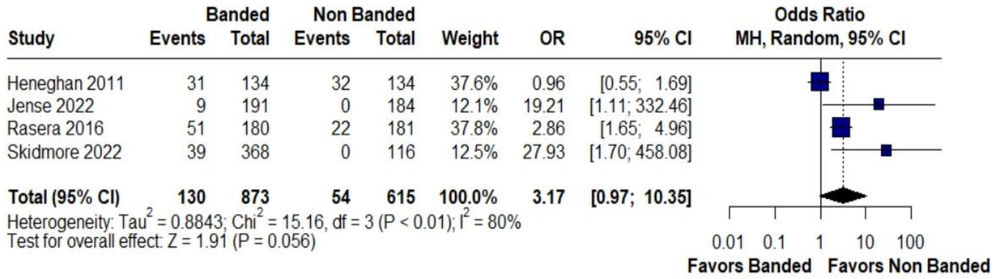
PubMed, Cochrane Central, Web of science and EMBASE were searched for studies comparing banded vs. non-banded RYGB until May 2024. Studies lacking control groups or having overlapping populations were excluded. Our primary outcomes of interest included weight loss, postoperative complications and incidence of vomiting.



Silastic ring opened and simulating his configuration in the gastrojejunal anastomosis



Reduction in EWL for the intervention group at 2 years (MD 7.4; 95% CI 10.7–4.1; I2 = 73%; p <0.01)



The banded group experienced increased vomiting/food intolerance (OR 3.17; 95% CI 0.97–10.35; I2 = 80%; p <0.01)

"Placing a silastic ring in gastric bypass surgeries may enhance weight loss outcomes, particularly in the first two years following surgery, but increases the risk of chronic postoperative vomiting."

Results

Of 1878 initial studies, fourteen comparing banded vs. non-banded RYGB surgeries were included, involving 18,474 patients (3441 banded, 18.6%). The banded group showed greater BMI reduction and excess weight loss, but also higher rates of food intolerance and vomiting (OR = 3.2; p = 0.05). No significant differences in complications (OR = 1.1; p = 0.4) or mortality (OR = 1.4; p = 0.5).

Conclusion

Conclusion: Banded RYGB may improve early weight loss but increases the risk of vomiting, without affecting long-term complications or mortality. Although it may lead to more significant short-term weight loss, it does not guarantee long-term success and carries the risk of chronic vomiting and its complications."

Scan for more details and references