Safety and Outcomes of Bariatric Surgery in Patients with Inflammatory Bowel Disease: A Systematic Review and Meta-analysis

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BACKGROUND

- Prevalence of obesity is rising globally, including in patients with inflammatory bowel disease (IBD).
- There is significant reservation to perform bariatric surgery in this patient population due to the risks of adverse postoperative outcomes like leaks, wound infections, and malnutrition.
- Since bariatric surgery may also positively influence the disease course of IBD by reducing chronic systemic inflammation.

METHODS

- This systematic review and meta-analysis was performed in keeping with the PRISMA and MOOSE guidelines.
- We evaluated adult subjects (>18 years) with IBD undergoing any bariatric surgery compared to those without IBD.
- Primary outcome → postoperative complications.
- Secondary outcomes → anthropometric outcomes, and IBD disease control.

RESULTS

- We reviewed 2703 studies with 11 (6 retrospective cohort studies, 4 retrospective observational studies, and 1 prospective descriptive study) meeting inclusion.

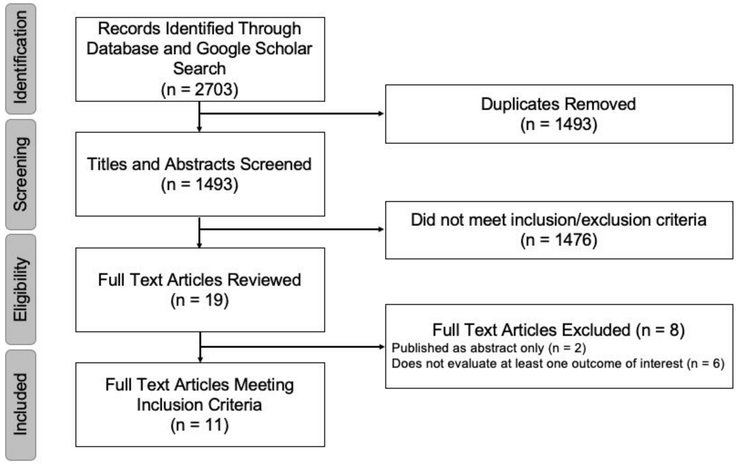


Figure 1. PRISMA diagram of search strategy.

	IBD (n= 1,595, 0.5%)	Non-IBD (n=314,267, 95.5%)
Female (%)	55.7	78.3
Age (years)	46.0	45.5

Table 1. Demographics of the IBD and non-IBD cohorts.

- There were no significant differences in demographics between the two cohorts.

RESULTS

- Patients with IBD had significantly increased likelihood of post-operative complications (RR 2.14; 95% CI 1.87-2.44; p<0.00001; I2 =0%) compared to patients without IBD.
- Mortality and length of hospital stay were similar between groups.
- Patients with IBD achieved on average a 55.1% excess weight loss.
- De-escalation of IBD medication was achieved in 11.4% of participants, while 9.7% required escalation of medication, and 38.9% had no change in medication.



Figure 2. Odds of postoperative complications in the IBD vs non-IBD cohort.

CONCLUSIONS

- While bariatric surgery presents a potentially effective weight loss option for patients with IBD, these patients are associated with higher rates of post-operative complications but no difference in mortality.
- Literature evaluating this topic is limited, warranting future research to better delineate the use of bariatric surgery in this patient population.

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