Bariatric surgery for severe obesity: systematic review and economic evaluation

Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors’ conclusions
The clinical review of effectiveness and safety found that although data from large, adequately powered, long-term RCTs are lacking, bariatric surgery seems to be more effective than standard care for the treatment of severe obesity in adults. Procedures that are mainly diversionary (for example, BPD) result in the greatest amounts of weight loss, hybrid procedures are of intermediate effectiveness (for example, RYGB), and restrictive procedures (for example, AGB) result in the least amounts of weight loss. RYGB and AGB tended to lead to trade-offs between the risk of adverse events and the need for procedure conversion or reversals. For sleeve gastrectomy, the evidence base was limited.

The volume-outcome review found that higher surgical volumes were associated with better clinical outcomes. We were unable to identify thresholds for surgical volume that were associated with better clinical outcomes. The economic evaluation comparing bariatric surgery to lifestyle modification (standard care) suggests that the treatment of patients with BMI of 35 kg/m2 or more with obesity-related comorbidity, or a BMI of 40 kg/m2 or more, may be attractive compared with accepted thresholds of cost-effectiveness. These results seemed to be mainly driven by gains in quality of life, and remained robust during sensitivity and scenario analysis. Estimated cost-utility ratios tended to decrease with greater levels of comorbidity in the population studied, and bariatric surgery was dominant (more effective and less costly) among obese people with concomitant diabetes mellitus. While all types of bariatric surgery that were considered were associated with cost-utility ratios that may be attractive when compared with standard care, there were fewer data (and thus greater uncertainty) on the relative merits and costs of the procedures — especially because the preferences of the patient and surgeon may influence the choice of surgery. The health services impact analysis found that current facilities do not meet existing demand, and that increases in capacity may not meet the potential demand. Triage strategies that equitably and effectively allocate bariatric surgery are needed to address this.

Project page URL
http://www.cadth.ca/media/pdf/H0485_Bariatric_Surgery_for_Severe_Obesity_tr_e.pdf

Final publication URL

Indexing Status
Subject indexing assigned by CRD

MeSH
Bariatric Surgerys

Language Published
English
Country of organisation
Canada

Province or state
Ontario

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AccessionNumber
32008100448

Date abstract record published
02/03/2009