

Evaluation of Type 2 Diabetes Remission and Relapse Rates after Bariatric Surgery

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Background

Obesity and type 2 diabetes are pandemics intimately intertwined with the formers' influence on the latter well documented in the literature. In recent years, bariatric surgery has presented itself not only as a tool for significant weight loss but a metabolic surgery with concurrent benefits to diabetes remission. This review aims to analyse how remission changes with time from surgery as weight recidivism is a common post-operative event.

Methods

A systematic review was performed on all eligible articles with short- and long-term data pertaining to type 2 diabetes remission after surgery. Articles were attained from a literature search of the PubMed database.

Results

From 490 abstracts, 56 full-text articles were reviewed, of which six met inclusion criteria of this review. Except for a single study, all studies reported initial remission more than 40% with the exception reporting remission at 21% in its first follow-up. Relapse varied between studies; four studies reported relapse between 10-20% within six years follow-up; one study 41.9% relapse when follow-up was extended to 15 years; another with relapse at 24% within 12 years and the final study reporting relapse at 28% within five years.

Conclusions

The likelihood of relapse has been underestimated with significant clinical consequences for both patients and clinicians when considering bariatric surgery in part due to the metabolic benefits. Accompanying weight recidivism post-surgery, relapse does not mean the end of surgery's benefits but apropos of the COVID-19 pandemic, every effort should be made to mitigate the possibility for relapse via pharmacotherapy and extended psychological support post-surgery.

