

SEVERE OBESITY IN ADOLESCENTS: A RANDOMIZED TRIAL COMPARING LAPAROSCOPIC ADJUSTABLE GASTRIC BANDING OR AN INTENSIVE MEDICAL PROGRAM

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Background

Adolescent obesity is a serious, common and growing health problem. The optimal approach to treatment and the role of bariatric surgery is not clear.

Aim

To compare, by randomised controlled trial, optimal non-surgical treatment with laparoscopic adjustable gastric banding (LAGB) measuring weight loss, health changes, quality of life and adverse events as the principal outcomes

Method

Patients were recruited by advertisement. 50 severely obese adolescents were randomly allocated into one of the two arms of the study, optimal medical therapy and LAGB, and followed for 2 years.

Results

The 50 participants had a mean age of 16.5, a weight of 117kg and a BMI of 41.2. 24 of 25 completed the surgical arm and 18 of 25 completed the medical arm. The surgical group lost 34.6 kg, 73% of excess weight and 12.7 BMI units. The medical group lost 3.0kg, 8%EWL and 1.2 BMI units. The metabolic syndrome was significantly reduced in the surgical group (9/25→0/24) but not in the medical group (10/25 →4/18). Insulin resistance was returned to normal in the surgical group but unchanged in the medical group. Quality of life (SF-36) was improved more in the surgical group. There was a need for 6 revisional procedures in the surgical group due to proximal gastric pouch enlargement.

Conclusion

LAGB provides better weight loss, health benefit and quality of life than an optimal non-surgical program but is associated with a significant need for revisional surgery. There is place of LAGB in adolescent obesity in the setting of good patient and family cooperation and informed multidisciplinary support.