

GLOSSARY

BMI

Body mass index = weight (kg) divided by the square of the height (m)

TH1 CELL

Type 1 helper T cell

long-term relief was more frequent in the brachytherapy group. Furthermore, patients treated with brachytherapy experienced fewer complications and reported slightly better quality-of-life scores. The two treatments were similar in terms of overall cost, survival and the incidence of persistent or recurrent dysphagia.

Concluding that single-dose brachytherapy was superior to stent placement in these patients, the authors recommend it as the primary treatment for dysphagia in this setting. They suggest that stent placement is appropriate for the rapid relief of severe dysphagia in patients whose life-expectancy is short, or for cases where brachytherapy has failed to resolve the problem.

Original article Homs MYV *et al.* (2004) Single-dose brachytherapy versus metal stent placement for the palliation of dysphagia from oesophageal cancer: multicentre randomised trial. *Lancet* **364**: 1497–1504

Surgical treatment of morbid obesity

EBM Around two-thirds of the US population are overweight (BMI ≥ 25) and 5% are morbidly obese (BMI ≥ 40 or BMI ≥ 35 with significant comorbidities). Various surgical procedures—collectively known as bariatric surgery—have been developed for morbidly obese patients who do not respond to diet or drug therapy. A recent systematic review and meta-analysis has looked for the first time at the effect of such interventions on common comorbidities, namely diabetes, hyperlipidemia, hypertension and obstructive sleep apnea.

Buchwald *et al.* combined the results from 136 studies (22,094 patients) of gastric banding or bypass, gastroplasty, biliopancreatic diversion or other forms of bariatric surgery. Patients lost a mean of 61.2% of their excess weight following surgery—often in excess of 45 kg—and operative mortality was low compared with that for other major surgical procedures. Diabetes was resolved or improved in 86.0% of patients, and this was apparent only days after surgery in some cases. Hyperlipidemia was improved in at least 70.0% of patients. Hypertension and obstructive sleep apnea were resolved or improved in 78.5% and 83.6% of individuals, respectively.

In summary, the majority of obese patients undergoing bariatric surgery achieved improvement or reversal of these common comorbidities. The authors comment that these benefits, along with weight loss, were likely to increase life expectancy at relatively low risk.

Original article Buchwald H *et al.* (2004) Bariatric surgery: a systematic review and meta-analysis. *JAMA* **292**: 1724–1737

Antibody treatment for Crohn's disease

Interleukin-12 is implicated in the pathogenesis of several autoimmune disorders. A recent phase II study has investigated the use of a human monoclonal antibody against this cytokine in the treatment of Crohn's disease.

A total of 79 patients with active Crohn's disease were randomized to receive seven weekly subcutaneous injections of anti-interleukin-12 antibody at two different doses (1 mg or 3 mg per kg body weight), or placebo. Approximately half of the patients received uninterrupted treatment, whereas the remainder had a 4-week interval after the first injection, to allow assessment of a single dose of the antibody.

At the end of treatment, 75% of patients who had received uninterrupted 3 mg/kg doses of the antibody showed a clinical response, compared with only 25% of those in the placebo group ($P=0.03$). The corresponding remission rates were 38% and 0% ($P=0.07$). The clinical response was sustained in the treatment group during the following 18 weeks, although the difference from placebo was no longer significant at the end of this period (69% vs 25%, $P=0.08$). None of the other treatment groups showed significant responses to therapy. Patients receiving antibody treatment showed decreased secretion of other TH1-mediated inflammatory cytokines by mononuclear cells of the colonic lamina propria.

This early data suggests that anti-interleukin-12 therapy may have been associated with clinical improvement in patients with active Crohn's disease, and the authors add that this effect was related to a decrease in TH1-mediated inflammation.

Original article Mannon PJ *et al.* (2004) Anti-interleukin-12 antibody for active Crohn's disease. *N Engl J Med* **351**: 2069–2079