Review: counselling, pharmacotherapy, and surgery help obese adults lose weight


Clinical impact ratings GP/FP/Primary care ★★★★★ IM/Ambulatory care ★★★★★ Cardiology ★★★★★ Endocrine ★★★★★ Geriatrics ★★★★★

In adults, is obesity screening and treatment effective?

METHODS

Data sources: Medline, the Cochrane Library, and systematic reviews from the US, Canada, and the UK.

Study selection and assessment: randomised controlled trials (RCTs) or systematic reviews of screening and treatment for obesity. Drug treatment studies had to have ≥6 months of follow up; all other treatments had to have ≥12 months of follow up. Study quality was assessed using the US Preventive Services Task Force criteria.

Outcome: weight loss.

MAIN RESULTS

No RCTs evaluated the efficacy of obesity screening. Counselling and behavioural interventions: 3 systematic reviews showed that behavioural interventions promoting exercise and/or dietary change achieved small weight reductions (US: 29 RCTs, mean weight change over controls −3.3 kg, range −8.8 to 1.9 at ≥1 y) (UK: 24 RCTs, mean weight change over controls −3.0, range −10.6 to 1.4 at 12–60 mo) (Canada: 6 RCTs, mean weight change over controls −2.1, range −4.5 to −0.2 at 24–84 mo). Of 11 additional RCTs on high intensity interventions, 6 used a true control group; 4 showed effectiveness (weight loss of 2.5–5.5 kg more than controls at 12–54 mo). In the other 5 RCTs, 1 high intensity intervention was better than another. Moderate intensity interventions showed mixed results (2 RCTs), and 2 of 3 low intensity interventions were ineffective. Drug treatments: Sibutramine was moderately effective (7 RCTs, weight loss 2.8–4.2 kg at 8–52 wk) as was orlistat (10 RCTs, mean loss 3.5 kg at 1 to 2 y). 18 additional RCTs were consistent with the systematic review. Sibutramine led to weight loss of 2.8 kg (95% CI 1.6 to 4.0) to 7.8 kg (CI 5.9 to 9.7) more than placebo (6 RCTs). Orlistat (120 mg 3 times/d) led to a weight loss of 2.8 kg (CI 1.8 to 4.5) to 4.5 kg (CI not calculable) more than placebo (6 RCTs). 1 RCT showed a non-significant difference in favour of orlistat. Evidence for metformin was mixed. 1 RCT showed that sibutramine led to greater weight loss (13.4 kg) than orlistat (8 kg) or metformin (9 kg). Long term adverse events were not reported. Surgical approaches: 3 systematic reviews compared surgical techniques and did not include non-surgical control groups. 3 additional RCTs compared gastric banding with surgical controls. Groups did not differ in any RCT, but all treatments led to considerable weight loss (17 to >40 kg). The 3 RCTs did not report mortality; the main adverse events were reoperation and wound infection.

CONCLUSIONS

No studies have evaluated the effectiveness of obesity screening. Counselling and drug treatment lead to modest weight loss. Drug treatment seems safe in the short term, but long term effects have not been studied. Surgery has not been compared with non-surgical treatments; it can lead to large amounts of weight loss, but is associated with a substantial risk of complications.

For correspondence: Dr K M McTigue, University of Pittsburgh, Pittsburgh, PA, USA. mctiguekm@upmc.edu
Source of funding: Agency for Healthcare Research and Quality.

www.evidence-basedmedicine.com
Review: counselling, pharmacotherapy, and surgery help obese adults lose weight

Evid Based Med 2004 9: 110
doi: 10.1136/ebm.9.4.110

Updated information and services can be found at:
http://ebm.bmj.com/content/9/4/110

These include:

References
This article cites 5 articles, 1 of which you can access for free at:
http://ebm.bmj.com/content/9/4/110#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections

- Health education (374)
- Obesity (nutrition) (143)
- Screening (epidemiology) (249)
- Screening (public health) (249)
- Epidemiologic studies (1092)
- Hypertension (403)
- Clinical trials (epidemiology) (1594)
- Diabetes (365)
- Diet (262)
- Injury (154)
- Geriatric medicine (134)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/