Options

Print

PDF

Set alert

Fast track

PubMed record

Original research

Share

|

You need to be logged in to see your keywords

Antidepressants versus psychotherapy for bulimia nervosa: a systematic review

Bacaltchuk J, Trefiglio R P, de Oliveira I R, Lima M S, Mari J J

Authors' objectives

To assess the efficacy and acceptability of antidepressants compared to psychotherapy as single approaches for the treatment of bulimia nervosa.

Searching

The Cochrane Depression, Anxiety and Neurosis Group strategy was used to search MEDLINE, EMBASE, LILACS, PsycLIT, the CCTR, the Cochrane Depression Anxiety and Neurosis Group Database of Trials and the Science Citation Index (SCISEARCH) MeSH categories are listed. Databases were searched from 1966-1997. Reference lists of selected articles were scanned. First authors of all selected studies were contacted for information regarding possible unpublished trials.

Study selection

Study designs of evaluations included in the review

RCTs comparing any class of antidepressant medication with any type of psychotherapy, either parallel group design or crossover from which data for the first period could be obtained. Duration of treatment had to be longer than 4 weeks. Studies had to provide data for at least one primary outcome of interest.

Specific interventions included in the review

Antidepressants: desipramine, fluoxetine, imipramine.

Psychotherapy: individual cognitive behavioural therapy (CBT), nutritional counselling, intensive group CBT, intensive inpatient therapy. All classes of antidepressants and forms of psychotherapy were eligible for inclusion in the review.

Participants included in the review

Patients diagnosed according to Russell's, the American Psychiatric Association (DSM-III, DSM-III-R, DSM-IV) or ICD-10 criteria for bulimia or bulimia nervosa, irrespective of gender age or treatment setting. Studies were excluded if participants were patients with binge-eating/purging type anorexia nervosa or binge eating disorder as defined in DSM-IV. Mean age ranged from 24-30 years.

Outcomes assessed in the review

The number of patients per treatment group who showed a remission in the bulimic symptoms, defined as 100% reduction in binge-eating episodes from baseline at end point; number per treatment group who showed a clinical improvement in the bulimic symptoms defined as >50% reduction in binge-eating episodes from baseline at end point; mean difference in bulimic symptoms at end point; mean difference in severity of depressive symptoms at end point. Where binge-eating and purging episodes were reported, only binge-eating episodes were considered. Where only purging episodes were reported they were considered as binge-eating episodes. Acceptability of treatment was measured by analysing the number of patients per treatment group dropping out during the study.

How were decisions on the relevance of primary studies made?

One reviewer evaluated the abstract of each article identified by the search. Full papers were assessed by two reviewers independently without blinding.

Assessment of study quality

The Cochrane Collaboration handbook criteria were used (allocation concealment). RCTs had to meet criteria A or B (adequate/some doubt about allocation concealment) to be included. Two reviewers assessed methodological quality independently at the same time as screening studies for relevance.

Data extraction

The authors do not state how data were extracted for the review, or how many of the reviewers performed the data extraction. Data were extracted on: drug, psychotherapy, numbers of patients in each treatment arm, age, duration of therapy, outcomes.

Methods of synthesis

How were the studies combined?

For remission, clinical improvement and drop-outs, relative risks and 95% CIs were calculated for each trial. Pooled RRS were calculated using both fixed-effect and random-effects models. When overall results were significant the number-needed-to-harm (NNH) or number-needed-to-treat (NNT) were calculated. For continuous outcomes Hedge's 'g' (see Other Publications of Related Interest) was used to combine effect size across studies, correcting for sample size bias. Only trials with no statistical difference between groups in mean number of binges or depression scores at baseline were included.

Publication bias was assessed by means of the fail-safe N.

How were differences between studies investigated?

Heterogeneity in the results of trial was assessed by visual inspection of graphs and using the Q statistic.

Results of the review

Five RCTs (n=237) were included.

Fail-safe N for the outcome 'dropouts' was 8.

One trial was grade A for methodological quality, the other four were grade B.

Remission (5 RCTs): fixed-effect RR 1.33 (95% CI: 1.12, 1.59), random-effects RR 1.28 (95% CI 0.98, 1.67), p value for Q test = 0.071. Result in favour of psychotherapy (fixed-effect, not significant random-effects).

Drop-outs (4 RCTs): fixed-effect RR 2.23 (95% CI: 1.32, 3.77), random-effects RR 2.18 (95% CI: 1.09, 4.35), p value for Q test = 0.243. Result in favour of psychotherapy. NNH 4 (95% CI: 3, 11).

Bulimic symptoms (3 RCTs): effect size 0.3706 (95% CI: -0.4804, 1.2217), p value for Q test = 0.047. Significant heterogeneity, however effect size was not significant either including or excluding the outlier study.

Depression (3 RCTs): effect size 0.4028 (95% CI: -0.3889, 1.1946), p value for Q test = 0.1014.

Authors' conclusions
A meta-analysis including five RCTs showed a non significant difference in short-term remission of bulimic symptoms favouring psychotherapy. Remission rates were 20% for antidepressants and 39% for psychotherapy (p=0.07). Drop-out rates were higher (p=0.027) for antidepressants (40%) than for psychotherapy (18%). The number needed to harm (NNH) was four. Psychotherapy was superior to antidepressants but using a more conservative statistical approach this difference, although clinically relevant, was not significant. The number of trials might be insufficient to show the significance of a 20% absolute risk reduction in efficacy. Psychotherapy was a better accepted treatment.

CRD commentary
The review question and inclusion criteria were well thought out and the literature search was comprehensive and attempted to search for unpublished studies. Validity was assessed and results presented. Study details were not well presented but pooling seemed appropriate and the authors assessed heterogeneity. The authors' conclusions follow from the results.

Implications of the review for practice and research
Research: The authors state that more studies with larger sample sizes are needed in order to estimate better the differential effectiveness and acceptability of these two therapeutic approaches. Well-designed and unbiased RCTs evaluating short- and long-term outcomes including relapse and maintenance of remission are necessary. It is also important to define better the most useful outcome and to evaluate predictors of response to each treatment and the effects of combined treatments. Meanwhile, trials should report remission rates systematically as well as other relevant outcomes.

The authors also state that specifically designed studies allowing for economic analysis should be carried out, and that antidepressant medication may be considered a first-line treatment if psychotherapists trained for the treatment of bulimia nervosa are not available.

Bibliographic details
Bacaltchuk J, Trefiglio R P, de Oliveira I R, Lima M S, Mari J J. Antidepressants versus psychotherapy for bulimia nervosa: a systematic review. Journal of Clinical Pharmacy and Therapeutics 1999; 24(1): 23-31

PubMedID
10319904

Other publications of related interest
Hedges LV, Olkin I, Statistical methods for meta-analysis. San Diego (CA): Academic Press; 1985.

Indexing Status
Subject indexing assigned by NLM

MeSH
Adult; Antidepressive Agents /therapeutic use; Bulimia /drug therapy /therapy; Female; Humans; Male; Patient Compliance; Prognosis; Psychotherapy; Treatment Outcome

AccessionNumber
11999000920

Database entry date
31/03/2001

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.

Database of Abstracts of Reviews of Effects (DARE)
Produced by the Centre for Reviews and Dissemination
Copyright © 2012 University of York