Antidepressant treatment for postnatal depression

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Key findings

- Selective serotonin reuptake inhibitors (SSRIs) for postnatal depression (PND) increased response and remission versus placebo. In some trials psychotherapy was a co-intervention in both groups.
- SSRIs versus treatment as usual for 4 weeks followed by listening visits (non-directive counseling): found more improvement with SSRIs at 4 weeks but not later
- No differences were found between SSRIs and a tricyclic antidepressant

Evidence included in this review

Six randomized trials involving 596 participants in UK, US and Israel.

Quality assessment

Included trials have small numbers of participants and there is an overall high risk of attrition bias and selective reporting

Clinical implications

PND is a neglected area of clinical care and research, particularly in low-resource settings. In many settings, routine postnatal visits seldom take place, and when they do, routine screening for postnatal depression is seldom done. Many women suffer depression without being aware that it is a medical condition requiring treatment. The Edinburgh PND inventory is a clinical screening tool which has been validated in a low-resource setting in South Africa.

When PND is diagnosed, the limited evidence from randomized trials suggests that SSRIs are effective, but data on safety for breastfeeding babies is limited. Potential adverse effects on the baby need to be weighed against evidence that maternal PND impairs childhood development.

Further research

More research is needed on this debilitating and ubiquitous condition, including prevalence, strategies for prevention and diagnosis, and treatment, particularly in low-resource settings. The widespread use of injectable postnatal progestins in low-resource settings needs further consideration in this context, as one placebo-controlled trial in South Africa found an increased risk for PND with injectable progestins.

Cochrane review
Abstract

Postnatal depression is a common disorder that can have adverse short- and long-term effects on maternal morbidity, the new infant and the family as a whole. Treatment is often largely by social support and psychological interventions. It is not known whether antidepressants are an effective and safe choice for treatment of this disorder. This review was undertaken to evaluate the effectiveness of different antidepressants and to compare their effectiveness with other forms of treatment, placebo or treatment as usual. It is an update of a review first published in 2001.

To assess the effectiveness of antidepressant drugs in comparison with any other treatment (psychological, psychosocial or pharmacological), placebo or treatment as usual for postnatal depression.

We searched the Cochrane Depression, Anxiety and Neurosis Group's Specialized Register (CCDANCTR) to 11 July 2014. This register contains reports of relevant randomised controlled trials (RCTs) from the following bibliographic databases: The Cochrane Library (all years), MEDLINE (1950 to date), EMBASE, (1974 to date) and PsycINFO (1967 to date). We also searched international trial registries and contacted pharmaceutical companies and experts in the field.

We included RCTs of women with depression with onset up to six months postpartum that compared antidepressant treatment (alone or in combination with another treatment) with any other treatment, placebo or treatment as usual.

Two review authors independently extracted data from the trial reports. We requested missing information from investigators wherever possible. We sought data to allow an intention-to-treat analysis. Random effects meta-analyses were conducted to pool data where sufficient comparable studies were identified.

We included six trials with 596 participants in this review. All studies had a randomised controlled parallel group design, with two conducted in the UK, three in the US and one in Israel. Meta-analyses were performed to pool data on response and remission from studies comparing antidepressants with placebo. No meta-analyses could be conducted for other comparisons due to the small number of trials identified.

Four studies compared selective serotonin reuptake inhibitors (SSRIs) with placebo (two using sertraline, one using paroxetine and one using fluoxetine; 233 participants in total). In two of these studies both the experimental and placebo groups also received psychological therapy. Pooled risk ratios based on data from three of these studies (146 participants) showed that women randomised to SSRIs had higher rates of response and remission than those randomised to placebo (response: RR 1.43, 95% CI 1.01 to 2.03; remission: RR 1.79, 95% CI 1.08 to 2.98); the fourth study did not report data on response or remission.

One study (254 participants) compared antidepressant treatment with treatment as usual (for the first four weeks) followed by listening visits. The study found significantly higher rates of improvement in the antidepressant group than treatment-as-usual group after the first four weeks, but no difference between antidepressants and listening visits at the later follow-up. In addition, one study comparing sertraline with nortriptyline (a tricyclic antidepressant) found no difference in effectiveness (109 participants).

Side effects were experienced by a substantial proportion of women, but there was no evidence of a meaningful difference in the number of adverse effects between treatment arms in any study. There were
very limited data on adverse effects experienced by breastfed infants, with no long-term follow-up. All but 
one of the studies were assessed as being at high or uncertain risk of attrition bias and selective outcome 
reporting. In particular, one of the placebo-controlled studies had over 50% drop-out.

The evidence base for this review was very limited, with a small number of studies and little information on 
a number of important outcomes, particularly regarding potential effects on the child. Risk of bias, for 
example from high attrition rates, as well as low representativeness of participants (e.g. exclusion of women 
with severe or chronic depression in several trials) also limit the conclusions that can be drawn.

Pooled estimates for response and remission found that SSRIs were significantly more effective than placebo 
for women with postnatal depression. However the quality of evidence contributing to this comparison was 
assessed as very low owing to the small sample size for this comparison (146 participants from three 
studies), the risk of bias in included studies and the inclusion of one study where all participants in both study 
arms additionally received psychological therapy. There was insufficient evidence to conclude whether, and 
for whom, antidepressant or psychological/psychosocial treatments are more effective, or whether some 
antidepressants are more effective or better tolerated than others. There is also inadequate evidence on 
whether the benefits of antidepressants persist beyond eight weeks or whether they have short- or long-term 
adverse effects on breastfeeding infants.

Professionals treating women with severe depression in the postnatal period will need to draw on other 
evidence, including trials among general adult populations and observational studies of antidepressant safety 
when breastfeeding (although the potential for confounding in non-randomised studies must be considered). 
More RCTs are needed with larger sample sizes and longer follow-up, including assessment of the impact on 
the child and safety of breastfeeding. Further larger-scale trials comparing antidepressants with alternative 
treatment modalities are also required.

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