Preventive Interventions for Postnatal Psychosis

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Guest Editor’s note: This review was undertaken while 2 of the authors’ home windows were shattered by nearby bombing. This work is evidence of sanity amidst madness of war.

Key words: psychosis/postnatal/prevention/Cochrane/systematic/review

Background

Postnatal psychosis is a worldwide life-threatening condition that affects 1–2 in every 1000 new mothers. It has an abrupt onset within a month of childbirth. Affected new mothers rapidly develop frank psychosis, cognitive impairment, and disorganized behaviors. Factors that increase the risk of postnatal psychosis include primiparous mothers who are single or in older age; have past psychiatric history; and have family history of affective psychosis, prenatal depression, and autoimmune thyroid dysfunction. The risk of a future postnatal recurrence is 25%–57%. Preventive interventions for postnatal psychosis aim at identifying women with risk factors, early recognition of imminent psychosis through screening, and preventive drug therapy. Mood stabilizers, antipsychotic drugs, and hormone therapy may be beneficial in the prevention of postnatal psychotic episodes in women at risk.

Objectives

To investigate the best available evidence for interventions aimed at preventing postnatal psychosis.

Search Methods

We searched the Cochrane Schizophrenia Group Trials Register and the Cochrane Central Register of Controlled Trials in October 2012 using the search strategy of the Cochrane Schizophrenia Group.

Selection Criteria

All randomized controlled trials relevant to the prevention of postnatal psychosis

Data Collection and Analysis

Two review authors inspected all citations to ensure reliable selection. We assessed methodological quality of trials using the criteria recommended in the Cochrane Handbook for Systematic Reviews of Interventions. Two review authors would have independently extracted data. For homogenous dichotomous data, we planned to calculate the relative risk, 95% CI, and the number needed to treat/harm on an intention-to-treat basis.

Results

There are no included studies in this review. The electronic search produced 3 relevant references, among which we identified 2 old planned trials that seem never to have started and one study that we excluded because it was a report of a case series.

Authors’ Conclusions

This is not an empty review—it is a review full of unanswered questions. Despite growing interest in women's mental health, the literature in the area of postnatal psychosis is still very limited. It seems that clinicians have no choice but to continue with their current practices guided solely by varied clinical judgment. Women at risk of postnatal psychosis and their relatives are justified to be disappointed in the medical/research fraternity. Post hoc PubMed topic (not methodology specific) search identified mainly case series (table 1). Policy makers have no trial-based evidence upon which to base their guidelines. Certainly, preventive interventions for postnatal psychosis are difficult to justify with confidence without well-designed, well-conducted, and well-reported randomized studies. Available publications suggest that such studies are
Table 1. Nontrial Quantitative Reports—Identified in Post Hoc PubMed Search

<table>
<thead>
<tr>
<th>Report</th>
<th>Study Type</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stewart¹</td>
<td>Case series</td>
<td>Four women with history of postnatal psychosis</td>
<td>Lithium (900–1200 mg/d) immediately after delivery</td>
<td>All women did not develop postnatal psychosis</td>
</tr>
<tr>
<td>Stewart et al²</td>
<td>Case series</td>
<td>Twenty-one high-risk postpartum women</td>
<td>Lithium (750–1200 mg). Started within 24 h of delivery (N = 16), started at 34 wk (N = 4), throughout pregnancy (N = 1)</td>
<td>Two (10%) relapsed with postnatal psychosis</td>
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<tr>
<td>Austin³</td>
<td>Controlled trial</td>
<td>Seventeen women with bipolar disorder or puerperal affective psychosis</td>
<td>Lithium, during pregnancy or within 48 h after birth, for 3 months with serum levels of 0.4 mmol/l or more (N = 9); nontreatment group (N = 8)</td>
<td>Two (22%) in the lithium group relapsed with postnatal psychosis 10 d postpartum; 6 (75%) of the nontreatment group relapsed with postnatal psychosis</td>
</tr>
<tr>
<td>Cohen et al⁴</td>
<td>Retrospective case series</td>
<td>Twenty-seven women with bipolar disorder who had experienced at &gt;1 episode of bipolar disorder prior to index pregnancy</td>
<td>Prophylactic mood stabilizers (lithium) (N = 14); did not receive any prophylactic treatment (N = 13)</td>
<td>No women taking a mood stabilizer developed postpartum psychosis. One developed affective instability 3 months postpartum. Eight who received no treatment experienced manic or depressive relapse within the first 3 months postpartum. No information on postnatal psychosis is available</td>
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<tr>
<td>Sichel et al⁵</td>
<td>Case series</td>
<td>Eleven women were given estrogen following delivery, 7 had history of puerperal psychosis, and 4 of puerperal major depression</td>
<td>Oral Premarin (10 mg/d) administered following delivery in decreasing dosages over 4 wk</td>
<td>One experienced psychosis relapse during first postpartum week</td>
</tr>
<tr>
<td>Kumar et al⁶</td>
<td>Case series</td>
<td>Twenty-nine pregnant women with diagnosis of hypomania (bipolar II), mania (bipolar I), or schizoaffective disorder</td>
<td>Transdermal estrogen: (1) 200 μg/d, N = 13; (2) 400 μg/d, N = 3; (3) 800 μg/d, N = 13, all within 48 h after delivery and reduced by half every 4 d for 12 d</td>
<td>Twelve relapsed in total. Women taking estrogen 800 μg/d needed less subsequent psychotropic medication and were discharged sooner than those taking lower doses</td>
</tr>
<tr>
<td>Wisner et al⁷</td>
<td>Controlled trial</td>
<td>Twenty-six pregnant women diagnosed with bipolar disorder</td>
<td>Intervention: divalproex sodium 250 mg twice a day, immediately after birth (N = 15); control: postpartum monitoring alone without medications (N = 11)</td>
<td>No women developed postnatal psychosis. In the intervention group, 10 (67%) developed postpartum hypomania/mania, depression, or mixed-state diagnoses vs 8 (73%) of nonintervention group</td>
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possible, and funders of research may wish to make this work a priority. Details are available in the full review.\textsuperscript{11}

### References


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<tr>
<td>Sharma et al</td>
<td>Controlled trial</td>
<td>Twenty-five women with diagnosis of hypomania (bipolar II) and mania (bipolar I)</td>
<td>Olanzapine 5–10 mg alone or in combination with an antidepressant or mood stabilizer (N = 11); either antidepressants, mood stabilizers, or no medication for minimum of 4 wk after delivery (N = 14)</td>
<td>No postnatal psychosis in olanzapine group; 2 women (lithium and no medication) experienced postnatal psychosis in nonolanzapine group</td>
</tr>
<tr>
<td>Bilszta et al</td>
<td>Controlled trial</td>
<td>Twenty-three women with history of bipolar disorder or postpartum psychosis; controls: 15 healthy pregnant women</td>
<td>(1) Mood stabilizers, N = 7; (2) antidepressant or antipsychotic, N = 8; and (3) no medication, N = 4, all through pregnancy and postnatal period</td>
<td>No women taking a mood stabilizer relapsed during study</td>
</tr>
<tr>
<td>Bergink et al</td>
<td>Case series</td>
<td>Twenty-nine women with history of postpartum psychosis without any manic or psychotic symptoms outside postpartum period</td>
<td>Lithium prophylaxis (0.8 mmol/l minimum plasma level) immediately postpartum</td>
<td>Four of 9 women without postpartum prophylaxis and history of postpartum psychosis relapsed (44%); no relapse reported among women who initiated postpartum prophylaxis</td>
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