



Breastfeeding cessation: an unexplored risk factor in the postpartum period?

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Background

Despite the wealth of literature on postpartum mood disorders, limited attention has been directed towards understanding the specific dynamics between cessation of breastfeeding and the manifestation of manic or mixed affective symptoms.

This case, of a 34-year-old woman who presented with two distinct episodes of mania and psychosis shortly following cessation of breastfeeding her two children, supports the under-recognised idea of weaning as a potential risk factor for delayed postpartum mania/psychosis.

There are further case studies detailing similar affective presentations temporally related to breastfeeding cessation, and correspondence detailing a proposed mechanism but no larger scale studies to date.

Aims

1. To better understand the relationship between breastfeeding and mixed affective states and/or psychosis
2. To explore the idea of breastfeeding cessation and the accompanying neuroendocrine changes as a risk factor for mania and psychosis
3. To provide a starting point for a wider literature review looking at the current evidence for the relationship between breastfeeding and mania/psychosis

Case Report

Patient Background: 34-year-old female. Lives in her own home with husband and two children (aged 3 & 8 months).

Presentation: Gradual 2-month deterioration with out of character drinking/smoking/erratic driving, elated mood, indistinct auditory and visual hallucinations and anxiety surrounding safety of children as well as impulsive thoughts of self-harm and grandiose delusions about being “full of strength and power”. Initial symptom onset was within 2-3 weeks of drastic reduction in breastfeeding youngest child at the age of 6 months.

Psychiatric History: Diagnosed first episode psychosis (with affective component) in 2021 with 3-week long inpatient admission. Symptom onset within 2-3 weeks of weaning eldest child. Remained well in the community following discharge for a prolonged period and stopped taking medication during second pregnancy.

Family History: Mother had postpartum psychosis 6 months following delivery of the patient’s younger brother which was treated with electro-convulsive therapy (ECT). A maternal uncle is diagnosed with bipolar affective disorder.

Progress on the Ward: Commenced on quetiapine and lamotrigine increased with limited initial response. She initially demonstrated significant impulsivity and emotional dysregulation with two instances of ligating and an incident where she jumped over a fence and absconded. However, once dosages of quetiapine and lamotrigine were uptitrated she showed good response and was discharged home on both medications following a 7-week inpatient admission

Conclusion

Despite significant anecdotal evidence for the link between weaning and mania/mixed affective states, as well as a feasible proposed mechanism, breastfeeding cessation does not currently appear in the literature as a risk factor, and thus we do not counsel at risk patients on this transition.

The patient referred to in this case study was ultimately diagnosed with bipolar affective disorder, but the temporal relationship between her two distinct episodes of manic/psychotic symptoms and the weaning of her two children appears significant and is likely to have an impact on any future family planning.

Our proposal is to conduct a systematic review of available data and use this to guide further research.

The generation of more concrete evidence demonstrating this link will direct whether we need to amend our guidance and level of support to at-risk women during the process of weaning.

Literature

There is a significant dearth of literature surrounding the connection between breastfeeding and psychosis/mixed affective states. A small number of case reports exist reporting anecdotal evidence for the link between weaning and mania/psychosis, including Joyce, Rogers & Anderson (1981) who reported the case of a 33-year-old woman who presented with two distinct episodes of mania within 1 week of weaning each of her children.

Schmidt, Palmer & Frye (2016) also recognised a case of a 25-year-old who presented with a psychotic mixed mania (pressured speech, affective lability, expansiveness, distractibility, and tangential, grandiose, delusional self-referential content) ,again within 1 week following breastfeeding cessation. They identify a proposed mechanism of rapid-onset dopaminergic overactivity on breastfeeding cessation.

This neuroendocrine mechanism is recognised in other literature relating to the breastfeeding axis. The prolactin surge that is triggered by crying/suckling in breastfeeding is dependent on the inhibition of dopamine, and upon weaning the resultant decrease in prolactin leads to a rapid upregulation of dopamine (Deif et al. 2021). Given that increased dopamine function has been recognised as contributing to mania (Diehl & Gershon, 1992) and that drugs that are more specific for dopamine blockade tend to have antimanic properties (Cookson, 2013), this provides a viable hypothesis for a link between cessation of breastfeeding and manic/mixed affective states.

A longitudinal cohort study by Xu et al. (2014) looking at psychiatric admissions up to 1 year postpartum in New South Wales, also note a decrease in maternal hospital admissions for schizophrenia and bipolar affective disorder in breastfeeding mothers, suggesting that breastfeeding may be a protective factor or, alternatively, delay or mask onset of psychotic/affective symptoms.

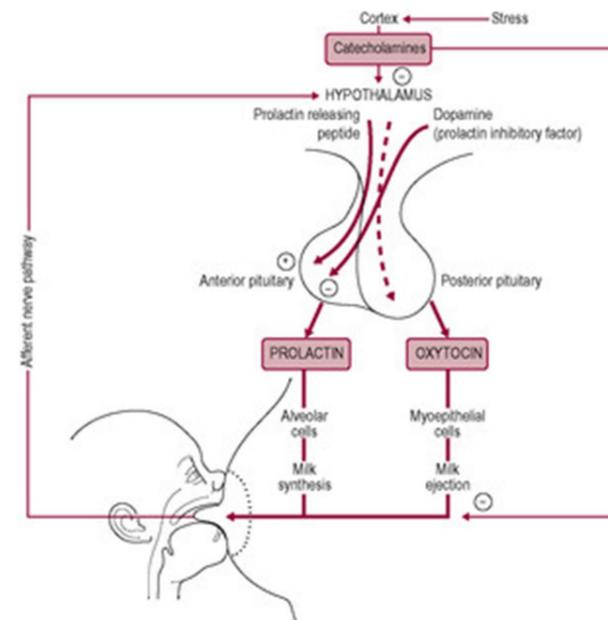


Figure 1: Breastfeeding Pathway

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