Symptomatic Management of Lactation Failure in Postpartum Bipolar Patients on Aripiprazole

Abstract

Bipolar disorder is a complex psychiatric condition that often requires continuous treatment, even during pregnancy. However, managing bipolar disorder in the perinatal period has unique challenges, particularly when balancing the safety of the fetus with the mental stability of the mother. Long-acting injectable (LAI) antipsychotics like aripiprazole are increasingly used during pregnancy for mood stabilization due to their lower teratogenic risk. Yet, aripiprazole's partial dopamine agonist activity can suppress prolactin levels, leading to lactation failure in the postpartum period.

This case report describes a 26-year-old woman with bipolar disorder who remained stable throughout her pregnancy on LAI aripiprazole, but developed primary lactation failure following delivery. Laboratory tests confirmed low prolactin levels. By reducing the aripiprazole dose and adding a low dose of risperidone, an antipsychotic known to increase prolactin, her milk production returned without compromising her psychiatric stability.

This case underscores the importance of a balanced approach in treating postpartum women with bipolar disorder. It highlights the need for proactive counseling about the potential lactation related side effects of prolactin-lowering antipsychotics, offers a stepwise strategy that begins with non-pharmacologic interventions and escalates to tailored medication adjustments as needed. Ultimately, this report emphasizes that lactation support and mood stabilization are not mutually exclusive and can be successfully achieved with thoughtful, individualized care.

Introduction

Bipolar disorder is a type of mood disorder characterized by fluctuations in mood, leading to symptoms of mania/hypomania and/or depression. According to the National Institute of Mental Health, 2.8% of US adults experienced bipolar disorder in the past year, and 4.4% of US adults

will experience it at some point in their lifetime.[1] Pregnancy is an important period where pregnant women with bipolar disorder need crucial support and care to suppress their symptoms and to ensure their child's safety. Data shows that every year, 2.6% of pregnant women in the US experience new-onset bipolar disorder (95% CI, 1.2% - 4.5%).[2] In women with a prior BD diagnosis, 54.9% (95% CI, 39.2%-70.2%) were found to have at least one bipolar-spectrum mood episode occurrence in the perinatal period.[2] According to one study, approximately 100,000 pregnant women in the US experience new-onset Bipolar disorder every year.[3]

The most common treatment for bipolar disorder involves mood stabilizers such as lithium or sodium valproate. However, these cannot be used during pregnancy due to their risk of teratogenic side effects such as Ebstein's anomaly, neural tube defects, and facial dysmorphology.[4] These adverse effects lead to the management of bipolar disorder in pregnancy with LAI antipsychotics instead of the first-line agents; however, these come with their unique side effect profiles. Some of the most common side effects include injection site reaction, sedation, somnolence, metabolic side effects such as weight gain, hyperglycemia, hyperlipidemia, and finally, prolactin abnormalities.[5]

Abnormalities in prolactin are common on antipsychotics due to their effect on dopamine in the tuberoinfundibular pathway. Most antipsychotics lead to increased prolactin levels due to their antagonism of dopamine receptors. In contrast, newer antipsychotics with partial agonism on dopamine receptors, such as aripiprazole, brexpiprazole, and cariprazine, can lead to an unexpected drop in prolactin levels, leading to lactation failure in the postpartum period.[6] This case report aims to study the symptomatic management of lactation failure in postpartum patients with bipolar disorder on LAIs with partial agonism of dopamine receptors.

Case Presentation

A 26-year-old woman first presented in July 2023 with a manic-psychotic episode at the age of 24. On the initial presentation, she showed signs of psychosis, grandiosity, pressured speech, insomnia, and risky behavior. Stabilization was achieved with oral lithium 300 mg and oral olanzapine 5 mg; however, the patient was not compliant with oral medications. Due to her noncompliance, aripiprazole 720 mg intramuscularly (IM) was initiated. Her management included giving aripiprazole 720 mg IM every 2 months to suppress her symptoms, and this was continued without relapse for 22 months.

In December 2024, on one of her follow-up visits, the patient stated that she had discovered she was 16 weeks pregnant. After discussing the possible risks of side effects along with the risk of relapse rate being >70% if the aripiprazole IM injection was discontinued, the patient opted to

remain on the LAI for the remainder of her pregnancy. The patient let her obstetrician know about her antipsychotic treatment and was given the appropriate prenatal care for the remainder of her pregnancy.

In May 2025, she delivered a healthy 3.3kg baby boy with an Apgar score of 8/9 with no complications. 2 weeks after delivery, she came back to the clinic for her regular follow-up and aripiprazole injection. On this visit, she mentioned that she has not been able to lactate since delivery despite early skin-to-skin contact and frequent pumping. Her serum prolactin level was measured and found to be low. The LAI aripiprazole was reduced to 300 mg, and a risperidone 1 mg tablet nightly was initiated. The patient was also advised to stay hydrated, pump every 3 hours, and was referred for a lactation consultation.

The patient stated that she had begun lactating on her subsequent follow-up visit the next month. Her serum prolactin measured that it had increased back to physiological ranges, and her milk production was >450mL/day. The patient's condition remained stable, and her LAI dose was adjusted accordingly.

Discussion

Bipolar disorder(BD) affects roughly 2-3% of women of childbearing age in the US, and in women with a prior BD diagnosis, 54.9% (95% CI, 39.2%-70.2%) were found to have at least one bipolar-spectrum mood episode occurrence in the perinatal period.[2] Untreated BD carries higher obstetric and neonatal morbidity than most modern psychopharmacologic exposures .[7] Therefore, maintenance therapy is the standard of care during pregnancy.

Current guidelines(ACOG) clinical practice guidelines recommend continuing the efficacious prepregnancy regimen whenever possible, preferring monotherapy at the lowest effective dose, and favoring agents with the most reassuring reproductive safety data.[8] Notably, guidelines show that lamotrigine can be used for bipolar depression, and lithium or second-generation antipsychotics(SGAs) for mania or psychosis.[9] LAIs are being increasingly utilized to manage mania or psychosis in pregnant women since lithium has possible teratogenic effects.[9]

Antipsychotics exert their actions by antagonizing dopamine D2 receptors across all four dopaminergic tracts.[10] Antipsychotics are generally classified into first-generation antipsychotics(FGAs) and second-generation antipsychotics(SGAs). FGAs such as haloperidol, fluphenazine, and chlorpromazine have a high affinity for dopamine D2 receptors. In contrast, SGAs such as risperidone, olanzapine, and quetiapine retain their D2 antagonism but add

variable serotonergic (5HT2A) antagonism, which mitigates some of the SGAs' side effects.[11] FGAs notably cause extrapyramidal symptoms (EPS) such as acute dystonia, akathisia, drug-induced parkinsonism, and tardive dyskinesia .[11] Since SGAs have a different mechanism of action compared to FGAs, they have a unique side effect profile due to their action on serotonin, histamine, and cholinergic receptors.[11] Some of these include sedation, weight gain, dry mouth, constipation, urinary retention, and orthostatic hypotension, among others.[11]

SGAs can be segregated into two pharmacologic clusters based on their effect on prolactin. Prolactin-raising SGAs, such as risperidone and paliperidone, exert potent D2 blockade in the hypothalamus, leading to a marked increase in prolactin since the feedback mechanism in the tuberoinfundibular pathway is lost.[12] On the other hand, prolactin-sparing SGAs such as quetiapine, olanzapine, clozapine, and ziprasidone produce a smaller prolactin elevation. Aripiprazole is a unique SGA since it has a partial agonist effect on D2 and D3 receptors. Aripiprazole functionally acts as an antagonist in the mesolimbic pathway, which helps reduce symptoms of mania and psychosis, yet as an agonist in the tuberoinfundibular neurons, which can suppress prolactin levels.[12] This property explains why aripiprazole has the opposite effect on prolactin levels compared to other SGAs.

In pregnant women who are on aripiprazole injection, there is a concern for lactation failure in the postpartum period. Although these concerns are valid, the management of bipolar symptoms during the period of pregnancy outweighs the risk of potential side effects. Evidence-based management of aripiprazole-associated lactation failure begins with using the least disruptive measures and only moving to more active interventions if needed. The most foundational nonpharmacologic intervention includes skin-to-skin contact, frequent pumping, and guidance from a lactation consultant. In terms of pharmacologic interventions, there are a few options available. The initial step is to reduce the dose of aripiprazole or lengthen the injection interval in order to allow the drug to wash out. Aripriprazole's half-life is approximately 47 days, so even a modest adjustment can lead to elevation of prolactin levels over time. Another strategy is to either introduce or entirely switch to a prolactin-raising SGA such as risperidone. Risperidone, as in our case, is the most practical choice because it has a predictable effect, leading to increased prolactin levels.[13] Should pharmacologic prolactin augmentation remain insufficient, a short course of a dopamine antagonist, such as metoclopramide, can be employed. Since metoclopramide can cross the blood-brain barrier, it should be used with caution to prevent side effects such as akathisia, dystonia, drug-induced parkinsonism, and tardive dyskinesia.[13] By using this step-up algorithm, we can provide symptomatic management for lactation failure in postpartum patients diagnosed with bipolar disorder and on aripiprazole.

Conclusion:

This case highlights the importance of safeguarding maternal mood stability while supporting successful breastfeeding in women with bipolar disorder who receive long-acting aripiprazole during pregnancy. Our patient's primary lactation failure, confirmed by sub-physiologic prolactin, resolved promptly after a dose reduction of aripiprazole and the addition of low-dose

risperidone, without precipitating mood relapse. The clinical course reinforces three practice points. First, the morbidities associated with untreated bipolar disorder in the perinatal period generally exceed those linked to contemporary psychopharmacology. Continuation of effective maintenance therapy, therefore, remains the default approach. Second, aripiprazole's partial agonism at D2/D3 receptors confers a unique, prolactin-lowering profile that can affect lactogenesis, a predictable mechanism that warrants proactive counselling and laboratory monitoring. Third, lactation failure need not mandate discontinuation of mood-stabilizing treatment: a staged algorithm beginning with non-pharmacologic support, proceeding to LAI dose reduction, and, when necessary, strategic substitution or augmentation with a prolactin-raising antipsychotic offers a pragmatic, evidence-informed pathway to restore milk supply while preserving psychiatric equilibrium.

Prospective studies are now needed to quantify the incidence of aripiprazole-associated agalactia, delineate optimal switch and taper schedules, and clarify long-term neurodevelopmental outcomes in infants exposed to combination antipsychotic therapy via breast milk. Until such data accrue, individualized, shared decision-making anchored by serial prolactin measurement, lactation-consult involvement, and psychiatric surveillance remains the cornerstone of care for this vulnerable population.

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