



A CASE REPORT ON POSTPARTUM PSYCHOSIS

Obstetrics & Gynaecology

Dr. Jain Khusboo Ramesh

Junior Resident, Department Of Obstetrics & Gynaecology, Sree Balaji Medical College And Hospital, Chromepet, Chennai.

Dr. S. Nirupa

Associate Professor, Department Of Obstetrics & Gynaecology, Sree Balaji Medical College And Hospital, Chromepet, Chennai.

ABSTRACT

Postpartum psychosis (PPP) is a mental health emergency. This condition affects a person's sense of reality, causing hallucinations, delusions, paranoia or other behavior changes. In severe cases, people with PPP may attempt to harm themselves or their newborn. We present a case report of Postpartum psychosis encountered in the Obstetrics & Gynaecology department of Sree Balaji Medical College and Hospital. It will help us obtain a deeper understanding of the epidemiology, risk factors, pathogenesis, management and preventive strategies of postpartum psychosis.

KEYWORDS

mental health emergency, behavior changes, case report

INTRODUCTION

Postpartum psychosis (PPP), also known as puerperal psychosis can be defined as the abrupt onset of psychotic symptoms shortly after childbirth, typically within two weeks of delivery but less than 4 weeks postpartum. (1) It is a mood disorder seen in the postpartum period. It is classified in the "short psychotic disorder" section of the schizophrenia spectrum and other psychotic disorders of DSM-5. (2) It is defined as a major depressive / manic / mixed episode with psychotic features occurring within 4 weeks postpartum. (3) It affects 1–2 per 1,000 pregnancies. (3) Its prevalence is 0.1% to 0.2%, which is significantly lower than the prevalence of postpartum blues (50% to 75%) and postpartum depression (10% to 13%). (4) However, its onset is usually immediate and people with postpartum psychosis have a much higher risk of harming themselves, dying by suicide or harming their babies. Because of this, PPP is considered as a mental health emergency. (5)(6)

Case Report

A 28 year old, married for 1 year (second marriage), G3P1L1A1, with a previous full term vaginal delivery and spontaneous abortion through first marriage five years back, underwent emergency LSCS at 38 weeks + 5 days in view of cephalopelvic disproportion with fetal distress at our hospital. She was a known case of gestational diabetes mellitus on tablet metformin BD. She delivered an alive, term, male baby weighing 3.2kg. Her immediate postoperative period was uneventful. On POD 4, she developed rigors. She was afebrile but with tachycardia and all other vitals were normal. She was given injection chlorpheniramine and dexamethasone. Her vitals were being monitored. Gradually, patient became restless and anxious and started complaining of difficulty in breathing. Her saturation was normal, chest was clear. Except for tachycardia all her other vitals were normal. Her ECG was also normal. Patient soon started developing altered behavior. She became disorganized, non-cooperative, irritable, restless, agitated and delusional. She started pulling out her hair & clothes and exhibited rigors. She developed a confused stare followed by violent crying. However, she did not try to harm her baby. She was worried about the baby's well-being and constantly tried to vigorously & forcefully feed the baby. As per psychiatrist advice, she was given injection haloperidol & injection lorazepam after which she became less agitated. All the baseline investigations were done. Her ophthalmic evaluation showed a normal fundus. MRI Brain with MRA & MRV was done which showed no significant abnormalities. Further, patient was started on tablet olanzapine and was observed for any further symptoms. The patient as well as the attendant were psychoeducated. Patient was discharged on POD 10 with followup advice.

DISCUSSION

Postpartum psychosis is considered as a psychiatric manifestation with abrupt onset following childbirth. Its onset is typically sudden, and occurs within the first two weeks postpartum. (7) Clinical features include early manifestations such as elated, dysphoric, or labile mood, insomnia, agitation, altered behavior, obsessive thoughts about baby, delusions, hallucinations, disorganized behavior, psychomotor agitation, food rejection, catatonia, and severe mood changes (8).

Unusual psychotic findings include mood-incongruent delusions, thought broadcasting, ideas of reference, delusions of control, or command hallucinations. (9) The patient's thought process is often disorganized, and the patient presents with "cognitive disorganization psychosis," referring to confusion, perplexity, cognitive clouding, and organic-like hallucinations such as olfactory or tactile. (10) These patients tend to have a higher chance of suicidal or infanticidal thoughts and hence measures to ensure the safety of the patient and the infant should be taken. (11)

A few known risk factors for postpartum psychosis includes young age, primiparity, low socio-economic status, domestic violence, perinatal maternal complications, neonatal complications, cesarean section, absence of husband during delivery, single mothers, female baby, lack of social support, history of affective illness, stressful life events, estrogen withdrawal, family history of psychosis and sleep loss. (12) History of bipolar disorder and a previous history of postpartum psychosis are the most important risk factors for developing postpartum psychosis. (13) It occurs in 20% to 30% of women with known bipolar disorder and 50% of women with a previous history of postpartum psychosis. (14)(15)

Its pathogenesis is multifactorial. The early postpartum period is characterized by a significant drop in gonadal steroids. A theory proposes that some women may have different susceptibility to normal hormonal changes occurring during childbirth. After birth, a rapid decline occurs in the estrogen and progesterone levels. Estrogen affects both serotonin, which plays an important role in affective symptoms, and dopamine, which has an impact on psychotic symptoms. (16) A few studies have suggested that postpartum psychosis may be a variant of bipolar disorder and that hormonal and other physiological changes in the perinatal period may play an important role in its development. (17) Sleep deprivation is another potential etiological factor of postpartum psychosis, given the relationship between gonadal steroids and circadian rhythms. (18) It can also be a manifestation of a psychotic disorder such as schizophrenia. (19) Other recently reported potential etiologies include autoimmune thyroid dysfunction and immune system dysregulation. (20)(21)

PPP is one of the affective (mood) syndromes that can affect women in the postpartum period. Its differential diagnosis includes postpartum blues, postpartum depression and postpartum obsessive compulsive disorder (OCD). Postpartum blues affect 85-90% of women. It is a self-limited syndrome of mood lability, tearfulness, and feeling overwhelmed, but without serious effects on the woman's functioning. It occurs within days of birth and is generally resolved within two weeks. It is unrelated to psychiatric history, and requires no intervention other than support. (22) Postpartum depression is a more serious disorder that affects 10-20% of postpartum women. It can manifest as low mood, anhedonia, and sometimes suicidality. Symptoms begin in the third trimester or within four weeks postpartum and must last at least two weeks to qualify as a depressive episode. (23) Postpartum obsessive-compulsive disorder (OCD) is characterized by

frightening and unwanted intrusive thoughts (obsessions) that cause considerable distress to the patient and patient may either avoid things or engage in compulsive behavior (checking, seeking reassurance) to ease that distress. OCD has an increased risk of onset and flare during times of reproductive transition. (24) In addition to these psychiatric conditions, there are a number of medical conditions that must be considered as differential diagnosis in suspected cases of postpartum psychosis. It includes delirium, infectious diseases (mastitis, endometritis, encephalitis), cerebral venous thrombosis, stroke, pulmonary embolism, amniotic fluid emboli, Sheehan's syndrome, flares of autoimmune diseases, thyroid disorders, electrolyte abnormalities, acute hemorrhage, sepsis, drug toxicity and drug withdrawal.

PPP is a medical emergency and it requires immediate medical intervention and hospital admission for maternal care and for the safety of the baby. Separation from the infant may be necessary initially. Treatment is similar to that of non postpartum psychosis. Antipsychotics, mood stabilizers, and benzodiazepines are the interventions of choice. Benzodiazepines are used for insomnia and agitation, antipsychotics and mood stabilizers for psychotic and manic symptoms, and antidepressants for depressive symptoms. Electroconvulsive therapy (ECT) has been described as an effective treatment option in patients with severe catatonic features. It can yield rapid symptomatic improvement in mothers with postpartum psychosis. The only risks of ECT to a breast-feeding infant are the medications given for anesthesia and muscle relaxation, but since these medications are short-acting, it is expected that there is minimal transfer to the infant.

It is found that a structured treatment algorithm with the sequential addition of benzodiazepines, antipsychotics, and lithium may result in high rates of remission in patients and that lithium maintenance may be most beneficial for relapse prevention. (25) Benzodiazepines may have a role in the acute treatment of postpartum psychosis. Intramuscular lorazepam and haloperidol can be used to achieve rapid tranquilization. Once the patient becomes more stable, oral agents can be used. (25) Atypical antipsychotics are often first-line choices for psychosis and mania because of their tolerability. Olanzapine and Quetiapine are considered the most acceptable for lactating mothers. Chlorpromazine, haloperidol, and risperidone can also be given under supervision. (26) Remission is defined as the absence of psychotic, manic, and severe depressive symptoms for at least 1 week. (25) Once symptom remission is achieved, the benzodiazepine and antipsychotic drugs are tapered down and the woman is started on maintenance therapy. Lithium is another important medication for the management of postpartum psychosis. Patients treated with lithium had a significantly lower rate of relapse compared with those treated with antipsychotic monotherapy. (27) However, the use of lithium for breast-feeding mothers has generally been discouraged by the American Academy of Pediatrics (AAP) because of concerns regarding passage of the drug through breast milk. (28)

Establishing a regular sleep pattern is critical to the goal of improving the symptoms of postpartum psychosis. (29). Engaging the partner and family members is important in the treatment plan for any woman suffering from postpartum psychosis. Once the patient goes home, the support of the partner and family members are key in helping with the infant and letting the mother develop more confidence in her ability to recover and care for her child appropriately.

CONCLUSION

Postpartum psychosis is a rare condition, but it can seriously affect the health of the mother and baby. Key clinical features include mood fluctuation, abnormal thoughts or behaviors, and confusion. Women with a history of bipolar disorder are at heightened risk, as are first-time mothers. The initial clinical evaluation for postpartum psychosis requires a thorough medical and psychiatric history, physical and neurological examinations, and comprehensive laboratory analysis to exclude organic causes for acute psychosis. It carries high rates of suicide and infanticide and suspected cases require psychiatric evaluation as soon as possible. Treatment requires hospitalization and aggressive pharmacological management.

REFERENCES

- (1) Osborne LM. Recognizing and Managing Postpartum Psychosis: A Clinical Guide for Obstetric Providers. *Obstet Gynecol Clin North Am.* 2018 Sep;45(3):455-468. doi: 10.1016/j.ogc.2018.04.005. PMID: 30092921; PMCID: PMC6174883.
- (2) Postpartum psychosis published in the Eastern Journal of Medicine Volume:23,

- Number:1, January-March/2018
- (3) Postpartum Psychosis: Updates and Clinical Issues published in the Psychiatric Times Vol 31 Issue 1 on January 15, 2014
- (4) Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. *J Womens Health (Larchmt).* 2006;15:352-368.
- (5) Lavanya L, Raman K, Nambi S, et al. Familial Bipolar Variant of Postpartum Psychosis: A Case Report. *Ind J Priv Psychiatry* 2019;13(2):82-84.
- (6) Babu GN, Subbakrishna DK, Chandra PS. Prevalence and correlates of suicidality among Indian women with post-partum psychosis in an inpatient setting. *Australian & New Zealand Journal of Psychiatry.* 2008;42(11):976-980. doi:10.1080/00048670802415384
- (7) Kendell RE, Chalmers JC, and Platz C. Epidemiology of puerperal psychoses. *Br J Psychiatry.* 1987. 150: p. 662-73. [PubMed] [Google Scholar]
- (8) Brockington I. Postpartum psychiatric disorders. *Lancet* 2004; 363: 303-310
- (9) Wisner K, Peindl K, Hanusa BH. Symptomatology of affective and psychotic illnesses related to childbearing. *J Affect Disord.* 1994; 30: 77-87
- (10) Wisner K, Peindl K, Hanusa BH. Symptomatology of affective and psychotic illnesses related to childbearing. *J Affect Disord.* 1994; 30: 77-87
- (11) Spinelli MG. A systematic investigation of 16 cases of neonaticide. *Am J Psychiatry* 2001; 158: 811-813.
- (12) Upadhyaya SK, Sharma A, Raval CM. Postpartum psychosis: risk factors identification. *N Am J Med Sci.* 2014 Jun;6(6):274-7. doi: 10.4103/1947-2714.134373. PMID: 25006563; PMCID: PMC4083529.
- (13) Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. *J Clin Psychiatry* 2003; 64: 1284-1292.
- (14) Jones I, Craddock N. Familiarity of the puerperal trigger in bipolar disorder: results of a family study. *Am J Psychiatry.* 2001;158:913-917.
- (15) Blackmore ER, Rubinow DR, O'Connor TG, et al. Reproductive outcomes and risk of subsequent illness in women diagnosed with postpartum psychosis. *Bipolar Disord.* 2013 May 7; [Epub ahead of print].
- (16) Jones I, Craddock N. Searching for the puerperal trigger: molecular genetic studies of bipolar affective puerperal psychosis. *Psychopharmacol Bull.* 2007;40:115-128.
- (17) Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. *J Clin Psychiatry* 2003; 64: 1284-1292.
- (18) Sharma V, Mazmanian D. Sleep loss and postpartum psychosis. *Bipolar Disord.* 2003;5:98-105.
- (19) Bosanac P, Buist A, Burrows G. Motherhood and schizophrenic illnesses: a review of the literature. *Aust N Z J Psychiatry* 2003; 37: 24-30
- (20) Bergink V, Kushner SA, Pop V, et al. Prevalence of autoimmune thyroid dysfunction in postpartum psychosis. *Br J Psychiatry.* 2011;198:264-268.
- (21) Bergink V, Burgerhout KM, Weigelt K, et al. Immune system dysregulation in first-onset postpartum psychosis. *Biol Psychiatry.* 2013;73:1000-1007.
- (22) Campbell SB and Cohn JF. Prevalence and correlates of postpartum depression in first-time mothers. *J Abnorm Psychol.* 1991. 100(4): p. 594-9. [PubMed] [Google Scholar]
- (23) Yonkers KA, Vigod S, and Ross LE. Diagnosis, pathophysiology, and management of mood disorders in pregnant and postpartum women. *Obstet Gynecol.* 2011. 117(4): p. 961-77. [PubMed] [Google Scholar]
- (24) Forray A, et al., Onset and exacerbation of obsessive-compulsive disorder in pregnancy and the postpartum period. *J Clin Psychiatry.* 2010. 71(8): p. 1061-8. [PMC free article] [PubMed] [Google Scholar]
- (25) Bergink V, Lambregtse-van den Berg MP, Koorengel KM, et al. First-onset psychosis occurring in the postpartum period: a prospective cohort study. *J Clin Psychiatry.* 2011;72:1531-1537.
- (26) Klinger G, Stahl B, Fusar-Poli P, Merlob P. Antipsychotic drugs and breastfeeding. *Pediatr Endocrinol Rev.* 2013;10:308-317.
- (27) Bergink V, et al., Treatment of psychosis and mania in the postpartum period. *Am J Psychiatry.* 2015. 172(2): p. 115-23. [PubMed] [Google Scholar]
- (28) Sachs HC; Committee on Drugs. The transfer of drugs and therapeutics into human breast milk: an update on selected topics. *Pediatrics.* 2013;132:e796-e809.
- (29) Sharma V. Pharmacotherapy of postpartum psychosis. *Expert Opin Pharmacother.* 2003;4:1651-1658.