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Review Article

Postpartum psychosis-an emergent entity

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ABSTRACT

Postpartum psychosis is a rare mental health disorder. It is an emergency because it develops very rapidly and poses a threat to the life of both mother and her child. It is seen that women who suffer from postpartum psychosis have increased risk of committing suicide after delivery, which is also one of the largest causes of maternal mortality in the first-year post-delivery. A history of mental health disorders is deemed unnecessary in cases of post-partum psychosis as it can develop without any previous psychiatric conditions. In this article, the focus of discussion will be- Causes, Symptoms, Diagnosis of post-partum psychosis, Common treatment modalities and Prognosis of postpartum psychosis. We will also be discussing the relation of postpartum psychosis with other mental health illnesses like bipolar disorder and schizophrenia. This data might help in early detection, intervention, and overall improved outcomes in patients of postpartum psychosis.

Keywords: Postpartum, Emergency, Psychiatry, Psychosis

INTRODUCTION

Postpartum psychosis is an uncommon yet serious mental health disorder that can occur within the first few days to several weeks after delivery, increasing the risk of suicide.[1] The incidence rate is one to two per one thousand deliveries, which makes it one of the largest causes of maternal mortality in the first year and therefore classified as a psychiatric emergency which requires prompt attention and even hospitalization.[2] "Childbirth is a potential trigger for severe mood disorder, and this link gives us unrivalled opportunities for research into aetiology. In no other scenario can we identify individuals who are at high risk of experiencing a severe episode of mental health in a defined period".[3] When a patient suffers from postpartum psychosis, they pose a threat to not only themselves but also their child, which further increases the need for critical medical attention, early diagnosis and treatment.

EPIDEMIOLOGY

The rate of postpartum psychosis is 0.1%-0.2%, which, when compared to post-partum blues (50%-75%) and postpartum depression (10-13%) is much lower in mothers.[4] The condition is known to arise without any previous history of psychiatric illness, but those with a disorder especially bipolar I or previous episodes of post-partum psychosis face imminent threat of further episodes. The women who are diagnosed with schizophrenia have a 25% risk of experiencing worsening of symptoms during postpartum period.[5] After an episode of postpartum psychosis, the risk of recurrence in further pregnancies exceeds 50%. A large number of women who experience post-partum psychosis may also have episodes following psychotic symptoms. In 26% of women who receive pharmacotherapy for postpartum psychosis, symptoms can be seen even after one year.[6] Some studies suggest that physiological changes during pregnancy

potentially play a role in development of post-partum psychosis. Various studies connect postpartum psychosis to bipolar disorder due to its clinical presentation, long term course and link to family history.[7]

RISK FACTORS AND CLINICAL FEATURES

Primiparity, which means the first time delivery of a woman is known to be an important factor in the assessment and management of pregnant women.[8,9] Various environmental, psychological and biological factors have been studied to explain postpartum psychosis. Factors such as hormonal changes during puerperal period, lack of sleep, and increased environmental pressures, perinatal loss during childbirth and various congenital anomalies are some of the risk factors for postpartum psychosis.[10-12]

Despite the abovementioned risk factors, some researchers show the absence of any relationship between birth complications and postpartum psychosis in a study of first birth mothers without any previous psychiatric treatment.[13] On the other hand, women with bipolar disorder or those with previous episodes of postpartum psychosis are at risk for another episode. The possibility of developing this illness in the first year after delivery is estimated as ranging from 25%-50%.[14] Whereas the risk of suffering from bipolar after first episode of postpartum psychosis ranges from 40%-80%.[15] The relationship between hormones and postpartum psychosis requires further detailed studies. The decrease in estrogen and progesterone levels after delivery is suggested to play a role in potential triggering of postpartum psychosis. While estrogen is known to influence dopamine at the level of hypothalamus, some researchers suggest that the beginning of affective psychosis after childbirth might be due to increased dopamine receptor sensitivity.[16]

Some studies investigating postpartum immunization show an association between postpartum psychosis and thyroiditis or pre-eclampsia, suggesting a relationship between these disorders.[17,18] Various other factors might influence this disorder. Those are as follows.

Genetic factors

A strong family history of bipolar disorder or postpartum psychosis increases the risk in the patient.

Hormones

The rapid changes in estrogen and progesterone after delivery might influence the onset of postpartum psychosis.

Immune system

Changes in immune system along with the stress involved in pregnancy might influence the onset of postpartum psychosis.

Environmental conditions

Sleep deprivation and lack of support system may contribute to the increased risk of postpartum psychosis.

Family history

A study by Jones and Craddock found that 74% women with bipolar and first degree relative with postpartum psychosis experience postpartum psychosis, whereas only 30% of women with bipolar without any family history suffer from postpartum psychosis. This study deals with the relationship between bipolar and postpartum psychosis in women.[19]

CLINICAL PRESENTATION

Postpartum psychosis is a severe disorder which develops rapidly, usually within the first few days following delivery.

The presenting symptoms include, delusions (strong false beliefs), hallucinations (an individual sees or hears things that others do not perceive), disorganized thinking, intense mood swings altering between mania (high energy and elation) to depression (profound sadness and hopelessness). Cognitive symptoms like confusion, difficulty focusing and mental lapses. Behavioral symptoms include restlessness, agitation, and erratic behaviors. Self-harm. Thoughts of harming the baby

DIAGNOSIS

The diagnosis of postpartum psychosis is a diagnosis of exclusion. It relies on the onset of psychosis in the first few weeks after childbirth. It is important to exclude other causes like severe postpartum depression, bipolar and organic causes like infection and metabolic abnormalities.[20] The evaluation of patient with postpartum psychosis must include a complete blood count, blood chemistry, thyroid function and antithyroid antibody measurement. A calcium level test, vitamin B12 evaluation and folate measurement should also be done. In certain cases, a neurological study as well as neuroimaging must be considered to rule out structural causes of psychosis.

Furthermore, a psychiatric evaluation, family history of psychiatric conditions and previous history of postpartum psychosis is indispensable. It is important to obtain as complete a history as possible.

MANAGEMENT

The management of postpartum psychosis depends on the presenting symptoms of the patient.[21] Both non-pharmacological and pharmacological treatments can be used as treatment methods. While some studies suggest immediate hospitalization of the patient due to risk of harm to self and the child, there is little evidence to

support the effectiveness of hospitalization in treatment of postpartum psychosis. Although there are no randomized controlled trials for treatments of postpartum psychosis, some studies suggest that mild to moderate patients can be treated at home rather than being hospitalized. There is increased emphasis on the patient's safety but also their comfort and need to bond with the newborn. Thus, hospitalization should be reserved for patients who are dangerous or so severely disturbed that they cannot get adequate rest, eat, and stay hydrated.

Treatment of postpartum psychosis with pharmacotherapy requires immediate, aggressive treatment to prevent progression and complications, especially in patients with severe symptoms. The choice of specific medications depends on diagnosis, previous response, medication availability, side-effect profiles, and clinician preference.

The first step in the pharmacologic treatment of postpartum psychosis is to treat agitation, delusions, and insomnia. This frequently requires the simultaneous use of a mood stabilizer, an antipsychotic, and sometimes a benzodiazepine. The initiation of any psychotropic medication should be done after the collection of blood samples for hematology, biochemistry, and pregnancy tests (tests not usually run during pregnancy), especially in patients for whom the last menstruation date is unreliable. Higher doses than used for treating no peripartum patients may be required to rapidly achieve therapeutic levels. Additionally, it's recommended to steer clear of using antidepressants as they could potentially lead to rapid cycling or mixed states.[21]

Hormones or their derivatives, including estrogen and progesterone, have been used as treatment for postpartum psychosis. Anecdotal reports and a few small low-quality non-placebo-controlled studies have described improvement in the symptoms of postpartum psychosis with gonadotropin-inhibiting hormones, estrogens, and progesterone.

PROGNOSIS

The management of postpartum psychosis should be quick and effective for positive outcomes. However, the risk of recurrence with subsequent pregnancies is high and must be considered while planning more pregnancies. Frequent follow-up should be arranged to monitor the signs of relapse and to ensure proper treatment of mental health issues. The outcomes are typically good with prompt intervention.

CONCLUSION

Postpartum psychosis is a serious psychiatric disorder that requires prompt intervention and effective management to prevent any harm to mother and her child. Early identification, evaluation and thorough treatment planning of the disorder can lead to better recovery outcomes.

More studies that focus on causes, risk factors and long-term course of post-partum psychosis are required to develop more effective preventive and treatment strategies.

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REFERENCES

1. Appleby L, Mortensen PB, Faragher EB. Suicide and other causes of mortality after post-partum psychiatric admission. Brit J Psyc. 1998;173:209-11.
2. Chin K, Wendt A, Bennett IM, Bhat A. Suicide and Maternal Mortality. Current psychiatry reports. 2022;24(4):239-75.
3. Jones I. Postpartum psychosis: an important clue to the Etiology of mental illness. World psychiatry. J Wor Psyc Asso. 2020;19(3):334-6.
4. Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. J Women Heal. 2002;15(4):352-68.
5. Blackmore ER, Rubinow DR, O'Connor TG, Liu X, Tang W, Craddock N, et al. Reproductive outcomes and risk of subsequent illness in women diagnosed with postpartum psychosis. Bipolar disorders. 2013;15(4):394-404.
6. Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. J Clin Psyc. 2003;64(11):1284-92.
7. Kirpinar I, Coşkun I, Cayköylü A, Anaç S, Ozer H. First-case postpartum psychoses in Eastern Turkey: a clinical case and follow-up study. Acta psychiatrica Scandinavica. 1999;100(3):199-204.
8. Pfuhlmann B, Franzek E, Beckmann H, Stöber G. Long-term course and outcome of severe postpartum psychiatric disorders. Psychopathology. 1999;32(4):192-202.
9. Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. J Women Health. 2006;15(4):352-68.
10. Sharma V, Smith A, Khan M. The relationship between duration of labour, time of delivery, and puerperal psychosis. J Affec Dis. 2004;83(2):215-20.
11. Makanjuola RO. Psychotic disorders after childbirth in Nigerian women. Tropical and geographical medicine. 1982;34(1)67-72.
12. Valdimarsdóttir U, Hultman CM, Harlow B, Cnattingius S, Sparén P. Psychotic illness in first-time mothers with no previous psychiatric hospitalizations: a population-based study. PLoS Medicine. 2017;6(2):3.
13. Noorlander Y, Bergink V, Van den Berg MP. Percived and observed mother-child interaction at time of hospitalization and release in postpartum depression and psychosis. Archives of women's mental health. 2008;11(1):49-56.

14. Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. The Journal of clinical psychiatry. 2003;64(11):1284-92.
15. Wieck A, Kumar R, Hirst AD, Marks MN, Campbell IC, Checkley SA. Increased sensitivity of dopamine receptors and recurrence of affective psychosis after childbirth. BMJ (Clinical research ed.). 1991;303(6803):613-6.
16. Bergink V, Kushner SA, Pop V, Kuijpens H, Lambregtse-van den Berg MP, Drexhage RC, et al. Prevalence of autoimmune thyroid dysfunction in postpartum psychosis. BJPsych. 2011;198(4):264-8.
17. Bergink V, Laursen TM, Johannsen BM, Kushner SA, Meltzer-Brody S, Munk-Olsen T. Pre-eclampsia and first-onset postpartum psychiatric episodes: a Danish population-based cohort study. Psychological medicine. 2015;45(16):3481-9.
18. Jones I, Craddock N. Familiarity of the puerperal trigger in bipolar disorder: results of a family study. Am J Psyc. 2015;158(6), 913-7.
19. Sit D, Rothschild AJ, Wisner KL. A review of postpartum psychosis. Journal of women's health. 2002;15(4):352-68.
20. Sharma V. (2003). Pharmacotherapy of postpartum psychosis. Expert opinion on pharmacotherapy. 2003;4(10):1651-8.
21. Chaudron LH, Pies RW. The relationship between postpartum psychosis and bipolar disorder: a review. The Journal of clinical psychiatry. 2003;64(11):1284-92.

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