**Postpartum psychosis**

Mesut Işık

*Van Education and Research Hospital, Department of Psychiatry, Van*

**ABSTRACT:**

The postpartum period is a risky period for the emergence or exacerbation of psychiatric disorders. Postpartum psychosis is the most severe psychiatric disorder in the postpartum period that requires immediate intervention. In most of the cases, the onset is immediate and it is usually in the first two weeks of postpartum period. Sleep disturbances, mood swings, delusions, hallucinations, disorganized behavior, psychomotor agitation, food rejection may be seen. Due to risk of suicide and infanticide, patients should be admitted to the hospital. The most important treatment option in addition to antipsychotic drug therapy is electroconvulsive therapy. Bipolar disorder or postpartum psychosis history, sleep deprivation, primiparity, postpartum hormone changes are important risk factors. The etiology has not been clearly identified yet, although here are many ongoing studies.

**Key Words:** Postpartum, postpartum psychosis, pregnancy

**Definition of Postpartum Psychosis**

Postpartum period is a risky period for psychiatric diseases (1). Women experience 22 times more psychotic or mania episodes in postpartum period than in any other periods of their lives (2). Postpartum Psychosis (PP) is a rare and severe disease. (3). The prevalence of postpartum psychosis has been reported to be 0.1-0.2% (4). Postpartum mental disorders are not classified as a separate clinical diagnostic entity in the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5) and in the International Classification System of Mental and Behavioral Disorders (ICD) (5). In DSM-5, postpartum psychosis is classified in the "short psychotic disorder" section of the schizophrenia spectrum and other psychotic disorders.

**Clinical Manifestation of Postpartum Psychosis**

In most of the cases, the onset is fast and within the first two weeks of postpartum (6). PP has an average onset age of 26 years (7). Early manifestations include symptoms such as insomnia, mood changes, obsessive thoughts about baby, and later delusions, hallucinations, disorganized behavior, psychomotor agitation, food rejection, catatonia, and severe mood changes (8). Unusual psychotic findings are often in the form of reference, persecution, jealousy, grandiose delusions that are incompatible with mood. Delusions often have a bizarre character. "Schneiderian first-line symptoms" are relatively rare (9). Tactile and visual hallucinations that point to the organic syndrome can be seen. Severe mood symptoms such as depression, mania or mixed episodes are frequently observed. Affective phenomenology seems to be a feature of the disorder and is more common in PP than other psychotic disorders (10). Apart from affective symptoms, at the same time bizarre delirium-like symptoms may also be seen. Sometimes atypical cognitive symptoms such as disorientation, confusion can be observed in patients. Due to cognitive disorganization, patients may neglect the newborn and/or dangerous practices may arise while they are meeting the baby's needs (11). Strange beliefs and thoughts about birth or baby can be seen. In one study, it was stated that 28-35% of the women who were admitted with PP diagnosis had delusions about their babies, but only 9% of them had persecutory thoughts about their baby (12). It has been reported that the risk of suicide increased by 70 times in the first year after birth. Suicide is an important cause of maternal deaths and completed suicide has been reported in 2 of 1000 PP women (13). Suicidal attempts may be aggressive and irreversible. Although rare, the prevalence of baby killing, which is the most dramatic picture, has been reported to be 4% (14) and is associated with the denial of the pregnancy. In a study 16
infanticide cases were examined and it was reported that these mothers were affected by dissociative symptoms (15). These patients denied gravidity and birth pain; usually had dissociative hallucinations, short amnesia and depersonalization. For this reason, caution against suicidal or infanticidal thoughts is warranted and emergency measures and measures to ensure the safety of the patient should be taken.

**Risk Factors and Etiology**

Clinical parameters such as primiparity (16,17), puerperal hormone changes (18), sleep deprivation (19), and complications such as increased environmental stress, perinatal death during delivery, congenital malformation (20) have been reported to be risk factors for PP. As a matter of fact, primiparity is always seen as an important variable in modeling risk factors. However, in a study of women who had had first birth without previous psychiatric admission, there was no significant effect of birth complications on PP risk (21).

Bipolar disorder or PP episode history are the most important risk factors for postpartum psychosis. In both cases, the risk of postpartum psychosis in the postpartum period was reported to be 25-50%. (22). The likelihood of developing bipolar disorder after a new onset postpartum affective psychosis is known to be 40-80% (23). Some studies have reported that 72-88% of patients with PP develop schizoaffective disorder or bipolar disorder, 12% of them develop schizophrenia (24,25).

Very little research has been done to determine the association of PP and hormones. After birth, a rapid decline in estrogen and progesterone levels occurs and this is thought to be caused by PP. (26). Estrogen plays a role in dopaminergic activity in the hypothalamus and it has been suggested that there is a relationship between the emergence of affective psychosis after birth and increased sensitivity of dopamine receptors (26). However, this finding was not found in other studies (27). Estrogen receptor or glucocorticoid receptor gene polymorphisms have not been associated with PP (28,29). Postpartum psychosis has been associated with thyroiditis and preeclampsia in studies on the relationship between PP and postnatal immunization (30,31). It has been reported that in 4% of PP patients, central nervous system autoantibodies have been identified (32) and tryptophan pathway abnormalities have been found (33). It is clear that there is a need for further research to examine the etiology of PP.

**Differential Diagnosis of Postpartum Psychosis**

PP is considered an urgent situation which requires a possible hospitalization. A detailed history, physical and neurological examination, laboratory studies, and brain imaging are needed to exclude organic cause of acute psychosis at initial evaluation (34).

The primary psychiatric diagnosis that should be considered in association with early onset PP is bipolar disorder. Elevation, dysphoria, emotional lability, confusion and sleep disturbance are seen in bipolar disorder with psychotic features and PP (35, 9). PP patients differ from major depression patients since they have cognitive problems, delusional thinking, disorganized behaviors. Women who had previously psychotic depression may recur by having a PP episode shortly after delivery (36). PP may be the manifestation of a psychotic disorder such as schizophrenia. Despite the fact that previously diagnosed schizophrenia patients carry a risk of 25% for puerperal exacerbations (11,37), the prevalence of schizophrenia in early-onset PP has been reported to be low in many studies (3.4% -4.5%) (38).

**Prognosis of postpartum psychosis**

Longitudinal studies indicate a good prognosis for women who have experienced PP following bipolar disorder diagnosis. After a single PP episode, 75-86% of the symptoms are fully recovered (39). Of the patients diagnosed with schizophrenia; 50% recovered after PP episode, 33% had recurrent PP episodes and 5% became treatment resistant after a large number of puerperal and non-puerperal recurrences (40). Women who received help within one month after delivery had favorable outcomes and fewer long-term disability than women with late-onset PP; (13% and 33% respectively) (41). PP has been reported to recur in 65% of long-term follow-up studies (42). In a review of 16 studies, 18-37% of patients diagnosed with PP had another episode after delivery, whereas 39-81% reported having an episode without any association with childbirth status (23). In two studies conducted in our country Turkey, 65.2% (43) and 81.2 (16) cases of PP patients were reported to have recurrent episodes, respectively.

**Treatment**
PP is an emergency that requires immediate medical intervention and hospital admission. The patient must be hospitalized for maternal care and for the safety of the baby. Small samples, case reports and non-randomized trials were conducted frequently on PP. In the treatment, mood stabilizers, antipsychotics, ECT and benzodiazepines are the first-line drugs of choice. There are no randomized trials for ECT in PP. Positive treatment results were reported with ECT in a series of 5 PP treatment resistant cases (44). In a retrospective study, clinical ECT responses were compared between female patients with PP (58 subjects) and non-postpartum psychosis patients (56 subjects). A greater clinical improvement was seen with ECT in the PP group (45).

As a result, postpartum psychosis is a rare disease, but can seriously affect mother and baby health. The patient should be treated with hospital admission. Detailed history, physical and neurological examination, laboratory evaluations should be done. Investigations are continuing to elucidate the etiology of the disease.

References

27. Meakin CJ, Brockington IF, Lynch S, Jones SR. Dopamine supersensitivity and hormonal status in...


