Postpartum Psychosis

**A mother who appears extremely agitated, avoids her baby, is unable to function, or voices thoughts of harming herself or the baby necessitates immediate notification of facility security, emergency department staff, and the treating clinician.**

Description/Etiology

Postpartum psychosis (PP; also called puerperal psychosis) is a mood disorder in which women experience severe distortion of reality during the immediate postpartum period; hallucinations and delusions can occur, many of which involve thoughts of suicide and/or infanticide. Mothers with PP may present with a manic or depressed state and either state is considered a medical emergency.

Although the exact cause is unknown, multiple biologic and psychological factors are believed to be involved in the development of PP (for details, see Risk Factors, below). PP is sometimes characterized as a severe form of postpartum depression (PD; for information, see Quick Lesson About ... Postpartum Depression), but PP is differentiated from PD by the occurrence of psychosis, irrational thoughts, and bizarre behavior. A woman with PP may have delusions that her infant is evil or cursed, defective, or dead.

PP can manifest as early as 48–72 hours after delivery, and usually develops during the first two postpartum weeks. The differential diagnosis for PP includes certain medical conditions (e.g., hyperthyroidism, anemia, infection, encephalopathy associated with pre-eclampsia, stroke), hormone imbalance, sleep deprivation, comorbid mood disorders (e.g., major depression with psychotic features, bipolar disorder, obsessive-compulsive disorder, schizoaffective disorder, brief psychotic disorder, unspecified functional psychosis), and substance use/abuse. Patient education during pregnancy regarding the signs and symptoms of PD and PP is important to improve the chance of early detection and prompt treatment.

Inpatient hospitalization is recommended for treatment of mothers with PP in order to initiate suicide precautions and provide psychotherapy, pharmacologic agents (e.g., antidepressants, mood stabilizers, anxiolytics, antipsychotics), and emotional support and education for the patient and family members. Electroconvulsive therapy (ECT) may be considered in patients who are unresponsive to the initial recommended treatment. Treated patients have a good prognosis, although resolution of symptoms generally takes 2–3 months. Subsequent development of a bipolar disorder is common in women with PP.

**Facts and Figures**

**Risk for infanticide is as high as 4% among women with untreated PP.** PP occurs in 0.1–0.2% of deliveries compared with PD, which affects 10–15% of women after delivery. Risk of recurrence with subsequent pregnancies is 25–57%.

**Risk Factors**

Risk for PP is highest in women with bipolar disorder or a history of PP. Risk factors that are strongly associated with PP include feeling increased emotional stress about pregnancy and the responsibilities of child rearing, experiencing a sudden endorphin decrease with labor and abrupt hormone level changes after delivery, low serum levels of free tryptophan, and thyroid gland dysfunction. Other risk factors include having a personal history of high stress, anxiety, depression, schizophrenia, or PD; discontinuation of mood stabilizers; and anhedonia (i.e., loss of interest in previously enjoyed activities). Having a family
history of PP, PD, or other mood disorder (e.g., bipolar disorder) greatly increases the probability of developing PP, particularly in primiparous women. Interpersonal difficulties, inadequate psychosocial support, and the occurrence of unexpected adverse life events (e.g., death, loss of employment, financial difficulties) increase risk of PP. Certain genetic factors may increase risk of PP. In a case-control study of 100 women with PP, researchers identified several additional risk factors for PP, including maternal age < 25 years, lower household income, perinatal and neonatal complications, and absence of the women’s partner (Upadhyaya et al., 2014).

Signs and Symptoms/Clinical Presentation

Mild prodromal symptoms—including elation, anxiety, and insomnia—may develop during the third trimester, particularly during the last few antenatal days. Signs and symptoms of PP can progress rapidly. Manifestations that are similar to those in patients with psychosis unrelated to childbirth may develop as early as day 2–3 postpartum and usually develop within the first 2 postpartum weeks. Physical indicators include extreme agitation, restlessness, irritability, hyperactivity, inability to eat, and insomnia. Patients with depressed presentation may have a downcast or blank facial expression and extremely slow movements. Cognitive indicators include depression, preoccupation with guilt, feelings of worthlessness and isolation, extreme concern for the infant’s health, confusion, poor judgment, anxiety, high levels of stress, illogical thinking, hallucinations, delusions, periods of mania, severe emotional lability, disorientation, paranoia, and suicidal and/or homicidal ideation.

Assessment

› Patient History
  • Ask about personal/family medical, psychiatric, and medication history to identify risk factors and possible comorbid conditions
  • Assess for suicidal/homicidal ideation and level of threat to self and others

› Laboratory Tests That May Be Ordered
  • Thyroid function tests (T3, T4, TSH) may indicate hyperthyroidism
  • CBC may show anemia
  • UA may be abnormal
  • Fasting blood glucose level may indicate hypoglycemia, and elevated BUN levels may indicate kidney dysfunction, both of which can influence or mimic signs and symptoms of mood disorders
  • Serum and urine drug test results may indicate substance abuse

› Other Diagnostic Tests/Studies
  • CT scan and MRI may detect neurodegenerative disease, ischemia, or bleeding
  • Psychological assessment tools such as the Hamilton Rating Scale for Depression (HAM-D), the Hamilton Anxiety Scale (HAS), the Penn State Worry Questionnaire (PSWQ), and the Beck Anxiety Inventory (BAI) can be administered to assess for PP

Treatment Goals

› Promote Symptomatic Relief and Reduce Risk of Complications
  • Monitor vital signs, assess all physiologic systems, and review laboratory/other diagnostic test results for underlying conditions; immediately report abnormalities and treat, as ordered
  • Assess for suicidal/homicidal ideation and behavior and other clinical indicators of PP, and observe mother/infant interaction; follow facility protocols to immediately notify facility security and emergency department staff if patient is a danger to herself or the infant
    – Maintain patient safety (e.g., airway, circulation, and prevention of injury); provide 1:1 nurse staffing for protection of the patient and infant, as appropriate
    – Request immediate referral to a mental health clinician for evaluation, formulation of an individualized medication regimen, and counseling
  • Administer prescribed antipsychotic, mood stabilizing, anxiolytic, and/or antidepressant agents (e.g., sertraline, PARoxetine, and desipramine)
    – Monitor treatment efficacy and for adverse medication effects
    – Caution is needed if women treated with lithium choose to breastfeed; the infant should undergo periodic monitoring of lithium levels and thyroid function. Breastfeeding should be avoided in women treated with valproic acid or carbamazepine due to the risk of hepatotoxicity in the infant
• Follow facility pre- and post-procedural protocols if patient becomes a candidate for a procedure (e.g., ECT); reinforce pre- and post-procedural education and verify completion of facility informed consent documents

Promote Emotional Well-Being and Educate
• Assess patient/family member anxiety level and coping ability; provide emotional support, educate, and encourage discussion about PP risk factors, pathophysiology and treatment of PP, the prescribed pharmacologic regimen, treatment risks and benefits, and individualized prognosis
• Promote good nutrition and educate about strategies to improve sleep (e.g., adopting a healthy lifestyle that includes regular exercise, if appropriate; encouraging the patient/family to locate someone to help with care of the family and household, to increase the number of hours available to the patient for sleep and relaxation)

Food for Thought
• Prenatal care clinicians are encouraged to include screening for prodromal symptoms during the third trimester of pregnancy and to communicate identified signs and symptoms to the inpatient healthcare team
• Untreated PP can negatively affect mother-infant bonding, which can lead to stress within the parent-child relationship that increases risk of childhood developmental, learning, and behavioral deficits
• Interventions aimed at prevention of PP include identifying high-risk women, early detection through screening, and preventive drug therapy (e.g., with mood stabilizers, antipsychotics, and/or hormone therapy). However there is little published literature about the prevention of PP, and Cochrane reviewers recently found no randomized controlled trials of interventions for preventing PP (Essali et al., 2013)
• Women with bipolar disorder are more likely to develop PP after their first pregnancy than after subsequent pregnancies. Potential explanations for the influence of parity on PP risk include increased stress associated with a first pregnancy, immunologic and/or hormonal differences between first and subsequent pregnancies, and the possibility of preventive strategies being initiated to reduce risk PP in women with a history of the disorder

Red Flags
• Risk for infanticide is high in women with PP, and temporary separation of the mother and infant may be necessary

What Do I Need to Tell the Patient/Patient’s Family?
• Educate the patient and family about the importance of adherence to the prescribed medication regimen and when to contact the clinician if adverse effects develop
• Emphasize the importance of continued medical and psychiatric surveillance for monitoring of psychological and physical status
• Educate about the need to immediately notify the patient’s healthcare provider if the patient expresses thoughts of harming herself or her baby

References