

# Psychiatric Emergencies: Postpartum Psychosis and Mania

Contributors

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# Disclosures/Disclaimers/Acknowledgments

Dr. Beal and Dr. Osborne report no financial conflicts of interest



# How to use this material

- Review slides individually or as a self study group.
- For questions, go to normal view and read the notes.



# Learning Objectives:

- Identify prevalence, risk factors and screening for postpartum psychosis (PPP)
- Identify clinical features of PPP, mania, and other psychotic illnesses
- Describe the differential diagnosis for PPP
- Learn how to assess and treat PPP



# Outline:

- Introduction
- Epidemiology: rates/incidence, risk factors, screening, access
- Pathophysiology
- Diagnostic Criteria
- Clinical Features: clinical presentation and course/prognosis
- Differential Diagnosis and Assessment
- Treatment: psychopharmacology and non-pharmacology
- Key Clinical Points
- Conclusion



# Introduction: Postpartum Psychosis (PPP)

- Symptoms include confusion, psychosis, mania
- Strongly associated with bipolar disorder
- Rare but serious
- Considered a psychiatric emergency



# Epidemiology: rates/incidence



- It is rare, approximately 1 per 1,000 births
- The risk for first onset of affective psychosis is 23 times higher within 4 weeks after delivery compared with any other period during a pregnant person's life
- The majority of cases occur in the first 2 weeks after birth
- Increased risk for suicide and infanticide
- The risk of suicide in the setting of psychosis is estimated at 4% and infanticide is 1%
- PPP is relatively uncommon and the risk of suicide/infanticide is low; nevertheless PPP is always a psychiatric emergency due to the risks involved



# Epidemiology: rates/incidence

- An AFFECTIVE psychosis, strongly associated with pre-existing bipolar disorder
- But 50% of patients have no prior psychiatric history
- A subset of patients only have episodes in the context of the postpartum time-period
- The remainder of patients for whom PPP is their first psychiatric presentation (50–80%) will go on to be diagnosed with bipolar disorder
- Patients with schizophrenia and schizoaffective disorder may also have flares of psychotic illness in the postpartum, but this is not the same syndrome



# Epidemiology: risk factors

- Personal history of PPP or bipolar disorder
- Family history of PPP, bipolar disorder, schizoaffective disorder, or schizophrenia
- Discontinuation of psychiatric medications in patient with pre-existing bipolar disorder
- Sleep deprivation
- Primiparity



# Pathophysiology



- Hormonal changes after pregnancy
- Possible genetic variants of the serotonin transporter gene (5-HTT) and chromosome 16p13. No estrogen receptor or glucocorticoid receptor gene polymorphisms in relation to postpartum psychosis has been established
- Autoimmune and inflammatory etiologies as there is a co-occurrence with thyroiditis, preeclampsia
- Circadian rhythm disruption



# Screening

- All patients should be screened for personal and family psychiatric history at initial prenatal appointment
- Especially important to evaluate for a personal or family history of psychosis or mania, especially postpartum
- Patients with bipolar disorder and those with a history of PPP should be followed closely and treated prophylactically through pregnancy and postpartum
- If patient has a history of bipolar disorder or PPP, they should be referred for psychiatric evaluation and treatment
- There is no specific tool to screen for PPP, but the Mood Disorders Questionnaire can be used to screen for bipolar disorder



# Screening

- No standard screening tools
- Important questions:
  - Is this the patient's first psychiatric presentation?
  - If she has a psychiatric history, is it of depression, mania, or both?
  - Is there any family history of bipolar disorder?
  - Has the patient been using any substances?
  - Does the patient have thoughts of harming herself or the child?



# Screening and access to care



- Access to psychiatric care is a major barrier in the perinatal period
- Racial and ethnic minorities and patients with low socioeconomic status face social, logistical, systemic, and cultural barriers
- For patients with multiple risk factors for PPP, facilitate referral to a psychiatric provider or utilize access programs for consultation with a perinatal psychiatrist
- Integrated and collaborative care models may also help to reduce barriers to care and facilitate treatment during pregnancy and in the postpartum



# Clinical features: PPP

- Early symptoms:
  - insomnia
  - mood fluctuation
  - irritability
- Other symptoms:
  - Delirium-like appearance, with disorientation, confusion, derealization, and depersonalization
  - Mood-incongruent delusions often focused on the newborn (baby is defective, possessed, or in danger)
  - Disorganized, bizarre behaviors and obsessive thoughts regarding the newborn
  - Delusions of altruistic homicide (often with associated maternal suicide) to “save them both from a fate worse than death” may occur
- Mood symptoms always present -- usually mania, but can also be depression or mixed symptoms



# Clinical features: Patient quotations

- “Without any warning sign, suddenly my thoughts are unstoppable and fly around.”
- “Everything feels strange, and yet apparently nothing changed.”
- “The shadow takes over me and makes me do things. Yesterday the shadow made me put a pillow over the baby’s face.”
- “For in my paranoia I was certain that my husband was out to get me.”
- “I felt like, throughout most of it... like I was watching someone else do it.”



# Clinical features: Non-affective (chronic) psychosis



- Patients with schizophrenia and schizoaffective disorder may also have flares of illness in the postpartum, especially if they have stopped medications during pregnancy, but this is not defined as PPP per se
- Symptoms:
  - delusions (fixed false beliefs)
  - paranoia
  - hallucinations (hearing or seeing things that are not there)
  - disorganized thoughts or behavior
- Does not have to be accompanied by mood symptoms
- Will not present with delirium-like behavior



# Clinical features: Mania

- Symptoms:
  - Elevated or irritable mood
  - Increased self esteem or grandiosity
  - Decreased need for sleep
  - Rapid speech
  - Racing thoughts or flight of ideas
  - Distractible
  - Increased goal-directed activity (such as cleaning, cooking)
  - Increased dangerous behavior (spending lots of money, using substances, high risk sexual behaviors)

Mania	Hypomania
lasts 1 week or more	lasts at least 4 days
psychosis	no psychosis
impairs functioning or requires hospitalization	doesn't impair functioning



# Diagnostic criteria: distinguishing syndromes

	<u>Bipolar 1</u>	<u>Bipolar 2</u>	<u>Schizoaffective disorder</u>	<u>Schizophrenia</u>
<u>mania</u> (lasts 7 days or hospitalization)	<b>required</b>	no	at least one mood episode required	no
<u>hypomania</u> (lasts 4 days, milder, doesn't impair functioning)	can occur	<b>required</b>	at least one mood episode required	no
<u>depression</u> (lasts 2 weeks)	can occur	<b>required</b>	at least one mood episode required	no
<u>psychosis</u> (hallucinations, delusions, paranoia, or disorganized thoughts or behavior)	can occur	no	<b>required and must occur in the absence of mood symptoms</b>	<b>required</b>



## Case presentation

Sybil Smith, 27 year old G1P1 at 11 days postpartum, elementary school teacher with close, supportive family

No formal past psychiatric history, but her husband reports she is “anxious and perfectionistic” at baseline

Her mother calls your office seeking urgent evaluation

Husband accompanies patient to appointment and reports that wife is behaving oddly

Has not been sleeping

Per husband, patient has been very anxious and worried about whether tasks for baby care have been carried out appropriately

## Case presentation

Husband reports that wife is leaving notes all over the house about how to do things

He found the iron in the refrigerator yesterday

For last two days patient has been unwilling to let anyone else hold the baby

Has explained to husband that only she has the appropriate knowledge to take care of this special child

Husband has found patient standing over crib for long periods while baby is sleeping

Notices that wife appears to fear windows; pulled down all shades and avoided them for several days

But yesterday was seen standing by the open window holding the baby and looking confused

## Case presentation

On mental status exam, patient is mildly disheveled and makes poor eye contact

Speech is tangential, rapid, and disjointed

Patient is clinging tightly to baby

Patient darts suspicious glances at her husband and states that she is concerned husband will harm the baby

When asked how or why, patient explains that husband had gonorrhea several years ago and she is concerned that he will spread this infection to the baby, which is why she will not allow him to hold the baby

# Course and prognosis: PPP

- One cohort study reported episode duration similar to mood episodes seen with bipolar disorder outside the perinatal period (1 month for manic features and 2.5 months for mixed or depressed features)
- 50%–80% chance of developing another serious psychiatric episode, usually within the bipolar spectrum
- 29% risk of postpartum psychosis in subsequent pregnancies



# Key factors to determine differential diagnosis



- What is the timing of onset?
- Does the patient have a personal or family history of bipolar disorder?
- Is there cognitive disorientation and a delirium-like picture?
- Are mood symptoms present?
- Are psychotic symptoms bizarre and/or focused on child?
- Does the patient have insight into their symptoms?



# Differential Diagnosis

- Exacerbation of pre-existing psychotic illness (schizophrenia)
- Acute infection
- Peripartum blood loss and anemia
- Exacerbation of preexisting endocrine and/or autoimmune diseases such as primary hypoparathyroidism and thyroid disease
- Neurological symptoms should raise concern for anti-N-methyl-D-aspartate (NMDA) receptor encephalitis
- Late-onset inborn errors of metabolism can present with clinical features similar to postpartum psychosis.



# Assessment of Thoughts of Harming the Infant

## Obsessions

- Likely to improve as depression improves with antidepressant treatment
- Rarely have actual intent

## Ego-dystonic vs. ego-syntonic

- Thoughts that horrify the patient (dystonic) are likely to be intrusive obsessive thoughts
- Patient who is not horrified by thoughts, ego-syntonic

## Intent and plan

- Expressed intent, with or without a plan, is an emergency
- Patient should be hospitalized immediately in most cases

## Psychosis

- Always assess
- Presence of symptoms increases likelihood of patient acting on impulsive thoughts

## Suicidal thoughts

- Increase likelihood that patient may act on thoughts and should prompt hospitalization in most cases

Osborne & Payne, CLINICAL UPDATES IN WOMEN'S HEALTH CARE: *Mood and Anxiety*



This patient is  
not safe to  
leave!

Thoughts are  
**ego-syntonic**  
and patient  
has **bizarre**  
**beliefs**

Likely  
**postpartum**  
**psychosis**, a  
psychiatric  
emergency

Do not allow  
patient to  
leave your  
office! She  
must go to the  
**emergency**  
**room**

It is  
devastating to  
hospitalize a  
new mother  
away from her  
baby – but  
**safety trumps**  
**all**

# Assessment

- CBC to evaluate infectious processes
- CMP to evaluate for electrolyte disturbances
- UA to assess for cystitis
- TSH, free T4, TPO antibodies for thyroid disease
- Ammonia level to rule out urea cycle disorders
- Alcohol and substance use screening to identify toxic or withdrawal syndromes
- If a patient has neurological symptoms, such as seizures, decreased consciousness, dyskinesia, overt motor symptoms, or extrapyramidal symptoms, consider NMDA receptor autoantibody screening as well as brain imaging (MRI)



# Assessment

## Key Elements of Interview



**Asking** specifically about thoughts of harm to baby or self



**Normalizing** this, asking in non-judgmental way



**Checking** to see if these thoughts are ego-syntonic or ego-dystonic



Are there avoidance behaviors?



Are there other psychotic symptoms?



**Can this patient safely leave the office?**



# Assessment: sample script

It is overwhelming to be a new mom and sometimes during this time moms have thoughts of harming themselves or their baby.

- Are you having thoughts of harming yourself?
- Are you having thoughts of harming your baby?
  - Do you want to act on these thoughts?
  - Are these thoughts distressing to you?
  - Do you do anything to get rid of these thoughts, such as checking on baby or avoiding baby?
- Are you worried that anyone is after you or out to get you?
- Are you hearing or seeing things that are distressing to you?
- Speak to collateral:
  - Are there any concerning behaviors you have noticed?
  - Does the patient seem confused?
  - Is the patient sleeping?
  - Are you worried about safety of the patient or baby?



# Acute Management

- Suicide risk is HIGH in the postpartum
  - in some countries, LEADING cause of death in 1<sup>st</sup> year postpartum
- Infanticide risk in postpartum psychosis also high
- Suspected postpartum psychosis ALWAYS requires hospitalization
- It is often possible to obtain information from a collateral source without revealing information about the patient to maintain confidentiality
- However, in an emergency if there is a risk of danger to self or others, may have to breach confidentiality for safety



# Acute management

- Ensure safety, emergency psychiatric assessment, and psychiatric hospitalization
- Verbal de-escalation as able
- Medications:
  - Benzodiazepines (lorazepam)
  - Antipsychotics (high potency preferred, haloperidol or olanzapine, both have IM formulations)
  - Lithium



# Treatment

- Lithium is the drug of first choice unless contraindicated (due to impaired renal function or serious side effects)--highest likelihood of sustained remission
- Antipsychotics and/or benzodiazepines can be used for symptomatic relief upon initial diagnosis
- ECT if no response to lithium
- For women with a prior history of PPP, lithium prophylaxis in the postpartum is essential
- For women with a prior history of bipolar disorder, continuing mood stabilizer treatment during pregnancy and postpartum is strongly associated with a much lower rate of relapse
- For women with schizophrenia or schizoaffective disorder, antipsychotics are the mainstay of treatment (use what has worked before; remember, this is a DIFFERENT syndrome from PPP, a non-affective psychosis)



# Summary

- PPP is rare but occurs in 2-4 weeks postpartum
- Associated with increased risk of infanticide and suicide
- Risk factors include personal or family history of bipolar disorder
- Symptoms include insomnia, confusion, and ego-syntonic delusions
- It is a psychiatric emergency and requires hospitalization
- Treatment with lithium, antipsychotics, ECT
- Lithium prophylaxis is essential for women with prior history



# Reflection questions

- How would you identify if a patient is at risk for postpartum psychosis and how would you discuss this with the patient?
- What further questions would you ask if a patient reported thoughts to harm their baby?
- What initial management steps would you take with a patient with symptoms concerning for postpartum psychosis?



# Key references

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# Resources

Postpartum Support International: [PPP resources](#)

[MGH Postpartum Psychosis Project](#)

[MGH: Recognizing PPP](#)

[Action on Postpartum Psychosis](#)

LactMed

Mothertobaby.org

