Recognizing Postpartum Depression

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Overview

• Clinical spectrum of postpartum mood disorders
• Symptoms of postpartum depression
• Treatment of postpartum mood disorders
• Risk factors for postpartum mood disorders
• Screening for postpartum depression
Unlabelled use of medications

• No antidepressants or mood stabilizers have been approved for use during pregnancy or during the postpartum period
Epidemiology of Major Depression

- Lifetime prevalence rates
  - Women: 10% – 25%
  - Men: 5% – 12%

- Rates equal for pre-pubertal boys and girls

- Rates in women twice those of men following menarche
Hypothalamic-pituitary-ovarian axis

- Hypothalamus
  - GnRH
  - Serum

- Pituitary
  - FSH
  - LH

- Ovary
  - Estrogen
  - Progesterone

Suprahypothalamic central nervous system

Serotonin
Rates of MDD in Women Double the Rates in Men during the Reproductive Life Cycle

**Figure 1. Age-specific rates of major depression in the US**

Chart shows the steep rise in risk for major depressive disorder just as females enter the fertile period of their lives.
Episodes of Mood Disorders through a Woman’s Lifecycle

- Menarche
- Pregnancy
- Menopause
- Birth
- Death

Major Depression

- Premenstrual Dysphoric Disorder
- Postpartum Mood Disorders
Phases of Pregnancy and Birth

- Planning and conception
- Pregnancy – 1st vs 2nd vs 3rd trimester
- Delivery
- Postpartum
- Breastfeeding
Treatment of depression during pregnancy

• All medications have potential risks, especially in the first trimester.

• The process of discussing the risks of treatment versus the risks of not treating.

• Risk of relapse of depression during pregnancy if antidepressants discontinued prior to conception.
Depression during pregnancy

• No increase in rates of depression during pregnancy

• Diagnosis complicated by physical symptoms of pregnancy (insomnia, decreased energy, decreased concentration)

• Treatment complicated by potential risks to the fetus
Hormones and Postpartum Depression (PPD)

- Comparisons of hormone levels between women who did and did not develop PPD – no consistent relationship
  - Prolactin, progesterone, estradiol, free and total estriol, cortisol and urinary free cortisol

- No consistent relationship between postpartum thyroid dysfunction and PPD

- Progesterone not effective in systematic trials; estrogen may be helpful but limited data
Spectrum of Postpartum Mood Disorders

- **Postpartum blues** – “baby blues”
  - prevalence 30 to 85%

- **Postpartum depression** (nonpsychotic)
  - prevalence 10 to 15%

- **Postpartum psychosis**
  - prevalence 0.1 to 0.2%
Postpartum blues

- Onset of symptoms in the first week
- Typical symptoms:
  - Tearfulness, irritability, mood lability, dysphoria, anxiety and insomnia
- Peak in symptom severity by day 4 or 5
- Spontaneous remission of symptoms typically by day 10 (definitely by day 14)
Treatment of Postpartum blues

• Prenatal education
  – Parenting skills
  – Potential for mood symptoms

• Support and reassurance

• Monitoring for the emergence of postpartum depression
Postpartum Depression

• Onset typically in the first 3 months but can have an insidious onset (> 6 months)
• Comorbid anxiety symptoms are common
• Symptoms nearly identical to Major Depression
• First episode of psychiatric illness in ~ 50%
Symptoms of Major Depression

• Depressed or irritable mood or feeling nothing
• Decreased interest or pleasure in activities (anhedonia)
• Change in appetite or weight
• Sleeping more or less than usual

• Feeling restless or slowed down
• Fatigue or loss of energy
• Decreased concentration
• Feelings of guilt or worthlessness
• Recurrent thoughts of death or suicide
Symptoms specific to Postpartum Depression

- Ambivalent or negative feelings toward the infant
- Self-doubt concerning ability to care for the child
- Suicidal ideation
  - Attempts are relatively rare
  - Having young children is an independent protective factor
Risk factors for Postpartum Depression

• No demographic factors identified
• Marital discord or lack of social supports
• Emergence of depressive symptoms during pregnancy
• History of previous depressive episodes and family history of affective disorders
• First episode of psychiatric illness in ~ 50%
Screening for Postpartum Depression

- Obstetrical and pediatric follow-up appointments
- High frequency of neurovegetative symptoms in non-depressed postpartum mothers – changes in sleep, energy, appetite, libido
- Edinburgh Postnatal Depression Scale (EPDS)
  - 10 items, self-report
  - 5 minutes to complete
Edinburgh Postnatal Depression Scale (EPDS)

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - As much as I always could
   - Not quite so much now
   - Definitely not so much now
   - Not at all

2. I have looked forward with enjoyment to things
   - As much as I ever did
   - Rather less than I used to
   - Definitely less than I used to
   - Hardly at all

3. I have blamed myself unnecessarily when things went wrong
   - Yes, most of the time
   - Yes, some of the time
   - Not very often
   - No, never

4. I have been anxious or worried for no good reason
   - No, not at all
   - Hardly ever
   - Yes, sometimes
   - Yes, very often

5. I have felt scared or panicky for no very good reason
   - Yes, quite a lot
   - Yes, sometimes
   - No, not much
   - No, not at all

6. Things have been getting on top of me
   - Yes, most of the time I haven’t been able to cope at all
   - Yes, sometimes I haven’t been coping as well as usual
   - No, most of the time I have coped quite well
   - No, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleeping
   - Yes, most of the time
   - Yes, sometimes
   - Not very often
   - No, not at all

8. I have felt sad or miserable
   - Yes, most of the time
   - Yes, quite often
   - Not very often
   - No, not at all

9. I have been so unhappy that I have been crying
   - Yes, most of the time
   - Yes, quite often
   - Only occasionally
   - No, never

10. The thought of harming myself has occurred to me
    - Yes, quite often
    - Sometimes
    - Hardly ever
    - Never
Postpartum Relapse of Bipolar Disorder

• Comparison of admission rates
  (compared to non-pregnancy related periods)
  – During pregnancy  75% baseline
  – First month postpartum  8x increase
  – 2\textsuperscript{nd} to 12\textsuperscript{th} months postpartum  2x increase

• Bipolar relapse vulnerability high postpartum

Kastrup, et al., Nordisk Psykiatrisk Tidsskrift, 1989
Postpartum Psychosis

• Onset typically in first 2 to 4 weeks, but may be in first 48 to 72 hours

• Typical symptoms:
  – Agitation, restlessness, irritability, insomnia, manic and depressive moods, disorientation
  – Delusions – typically focused on the child
  – Auditory hallucinations – command hallucinations to harm self or the child
Treatment of Postpartum Psychosis

- Inpatient Treatment
- Antipsychotic medications plus Lithium or ECT
- Very high risk of suicide and infanticide if untreated
Impact of Postpartum Depression on Cognitive Functioning

• Prospective study of 94 mothers and their first born children

• Follow-up assessment at age 4

• Significant intellectual deficits in children with depressed mothers only if depressed in the 1st year of life

Cogill et al., 1986
Impact of Maternal Depression on Infant Development

- Maternal depression related to compromised social, emotional and cognitive function in infants
- Worse performance on object tasks
- Insecure attachment – avoidant or ambivalent
- Heightened distress and preoccupation with conflicts of others (especially adults)

Weinberg & Tronick, 1998; Murray, 1992; Radke-Yarrow et al., 1985; Zahn-Waxler et al., 1984
Treatment of Mood Disorders

• Medications – antidepressants or mood stabilizers
• Individual psychotherapy
• Education and support
• Family involvement and/or family therapy
• Control of behaviors (substance misuse, eating disorders, or cutting)
• Other treatments
  – Electro-convulsive therapy (ECT), TMS, Ketamine, Bright Light Therapy
Antidepressants

- **Selective Serotonin Reuptake Inhibitors**
  - Prozac, Zoloft, Paxil, Lexapro, Luvox, Celexa
- **Selective Serotonin-Norepinephrine Inhibitors**
  - Effexor, Cymbalta
- **Others**
  - Wellbutrin, Remeron, Nefazodone, Trazodone
- **Tricyclics**
  - Nortriptyline, Desipramine, Imipramine
- **MAO Inhibitors**
  - Parnate, Nardil, Marplan, Eldepryl, Emsam patch
## Selective Serotonin Reuptake Inhibitors (SSRIs)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Starting dose</th>
<th>Therapeutic dose range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>10 – 20 mg</td>
<td>20 – 40 mg</td>
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<tr>
<td>Escitalopram</td>
<td>5 – 10 mg</td>
<td>10 – 20 mg</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>10 – 20 mg</td>
<td>20 – 80 mg</td>
</tr>
<tr>
<td>Fluvoxamine</td>
<td>50 mg</td>
<td>100 – 300 mg</td>
</tr>
<tr>
<td>Paroxetine</td>
<td>10 – 20 mg</td>
<td>20 – 50 mg</td>
</tr>
<tr>
<td>Sertraline</td>
<td>25 – 50 mg</td>
<td>50 – 200 mg</td>
</tr>
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</table>
**“Other” Antidepressants**

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<tr>
<th>Medication</th>
<th>Starting dose</th>
<th>Therapeutic dose range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venlafaxine XR</td>
<td>37.5 – 75 mg</td>
<td>75 – 300 mg</td>
</tr>
<tr>
<td>Bupropion SR</td>
<td>100 mg</td>
<td>200 – 400 mg</td>
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<tr>
<td>Bupropion XL</td>
<td>150 mg</td>
<td>300 – 450 mg</td>
</tr>
<tr>
<td>Nefazodone</td>
<td>100 mg bid</td>
<td>300 – 600 mg</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>7.5 – 15 mg</td>
<td>15 – 45 mg</td>
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Breastfeeding and Antidepressants

• Benefit of breastfeeding vs. benefit of treating maternal depression
• Risk of exposure to medications in breast milk vs. *risk of not treating* the mother’s depression
• Increased risk of affective illness relapse in postpartum period
• Assessment of the risks & benefits of treatment is very individual and should include the child’s pediatrician
Conclusions

- Most women experience depressive symptoms postpartum
- Prenatal education and postpartum screening may significantly decrease the impact of postpartum depression
- Untreated postpartum depression has potentially severe consequences for mother and infant