
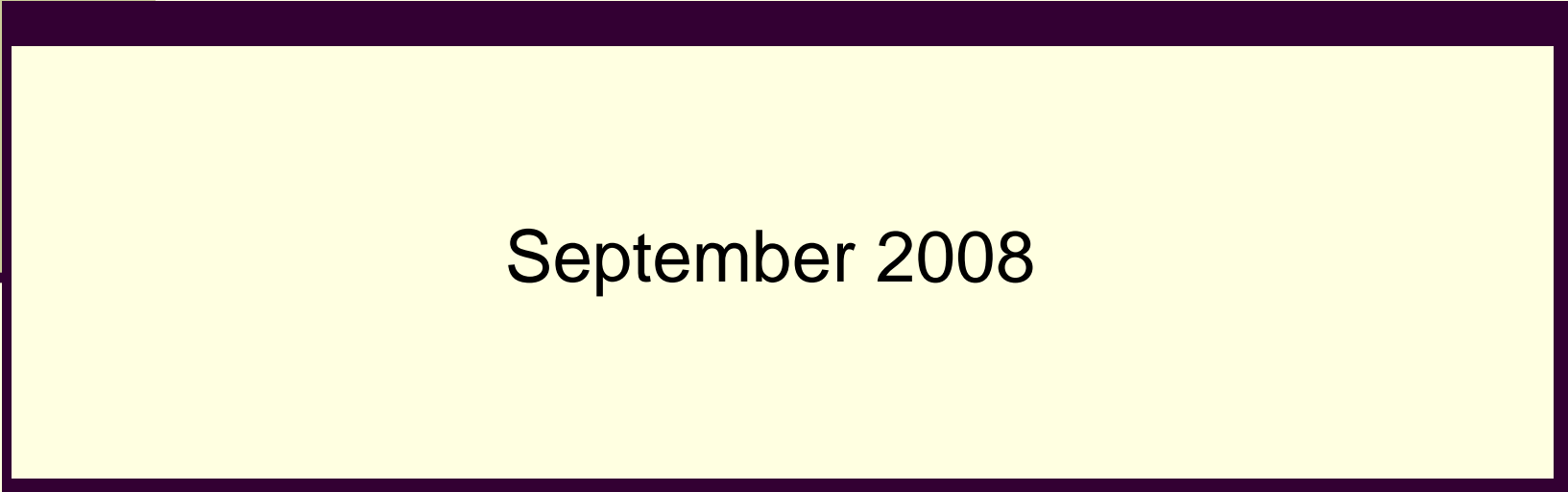


warning

- The conditions reviewed in this presentation are not meant to be minimized by the manner in which they are presented. The cartoon clips and commentary are not meant to be offensive; they are meant to lighten an otherwise dry review of an extensive topic



Mental Health Issues Throughout the Woman's Lifecycle
MENSES, MOTHERHOOD, MENOPAUSE
(AND OTHER 'MADNESS')



September 2008

gender

- Women have a significantly higher risk for developing mood disorders than men
- Women have a greater lifetime risk for depression than men (2:1)
- Prevalence of Bipolar Disorder is more equally distributed BUT rapid-cycling illness more prevalent in women
- Seasonal Affective Illness predominates in women

PMS HISTORY 1847

“The menses in sensitive women is almost always attended by mental uneasiness, irritability, and sadness.”

Dr. Ernst von Feuchtersleben

Journal of Forensic Sciences

*PMS, psychosis and culpability: sound or misguided defense? **

- **PMS has made it into the courts where it has been offered as a defense for criminal acts.**

*
Volume 47, Issue 5 (September 2002)

PATHOPHYSIOLOGY

- exact cause of PMDD is unknown.
- most current theory suggests that cyclic changes in ovarian steroids interact with central neurotransmitters to create symptoms of PMDD.
- *normal* ovarian function rather than hormone imbalance is the inciting factor for PMDD-related biochemical events in the central nervous system.

PATHOPHYSIOLOGY

- Serotonin is the neurotransmitter most studied in PMDD, although there is likely a role for gamma-aminobutyric acid (GABA) and beta-endorphin.
- Deficiencies of trace elements also may be implicated.

PATHOPHYSIOLOGY translated to TREATMENT

- **Ovarian Steroids**
- **Neurotransmitters**
- **Vitamins and Minerals**

treatment

- Two treatment modalities distinguish themselves as highly effective:
 - suppression of ovulation
 - specific serotonin re-uptake inhibitor (SSRI) antidepressants. *

* Expert Opin Pharmacother. 2002 Nov;3(11):1577-90

treatment

- Calcium carbonate and selective serotonin reuptake inhibitors have demonstrated excellent efficacy.

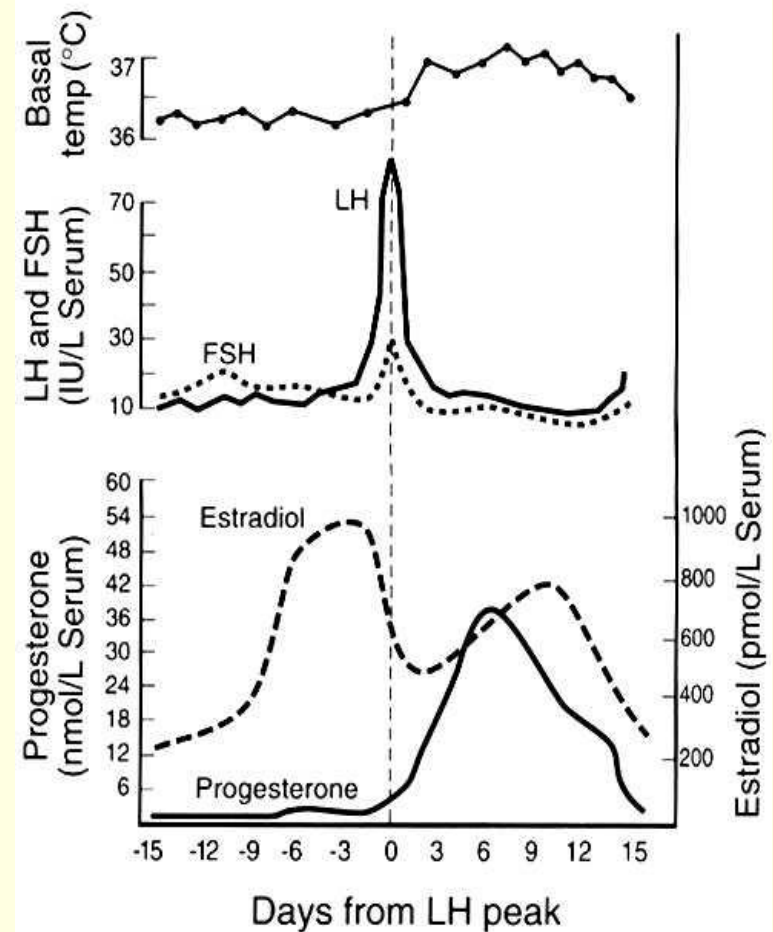
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J Gynecol Obstet Biol Reprod (Paris). 2007 Nov;36(7):642-52. Epub 2007 Feb 26

PATHOPHYSIOLOGY translated to TREATMENT

■ Ovarian Steroids

Estrogen and progesterone levels of control subjects and women with premenstrual symptoms have been shown to be the same, suggesting that affected women may have an abnormal response to normal hormone levels.



PATHOPHYSIOLOGY translated to TREATMENT

Neurotransmitters

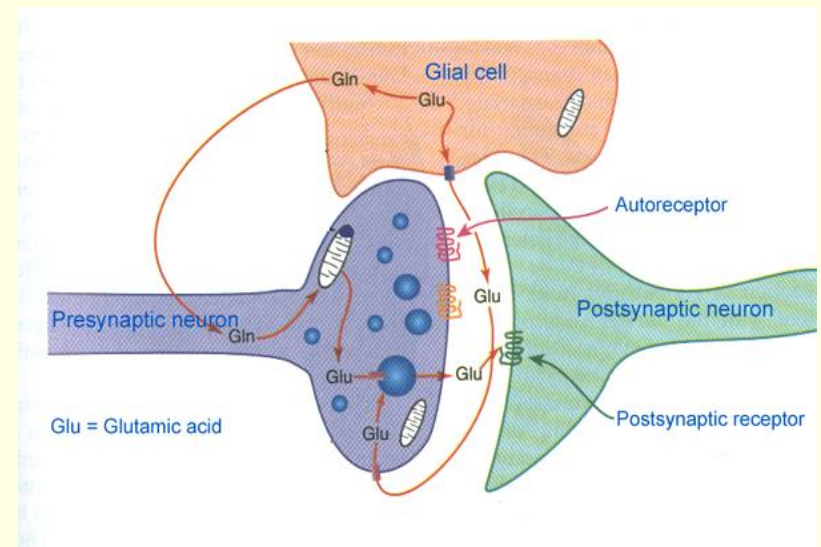
three main neurotransmitters (serotonin, GABA, and beta-endorphin)

PATHOPHYSIOLOGY translated to TREATMENT

Neurotransmitters

low serotonin levels

symptoms aggravated by depletion of the serotonin precursor tryptophan.



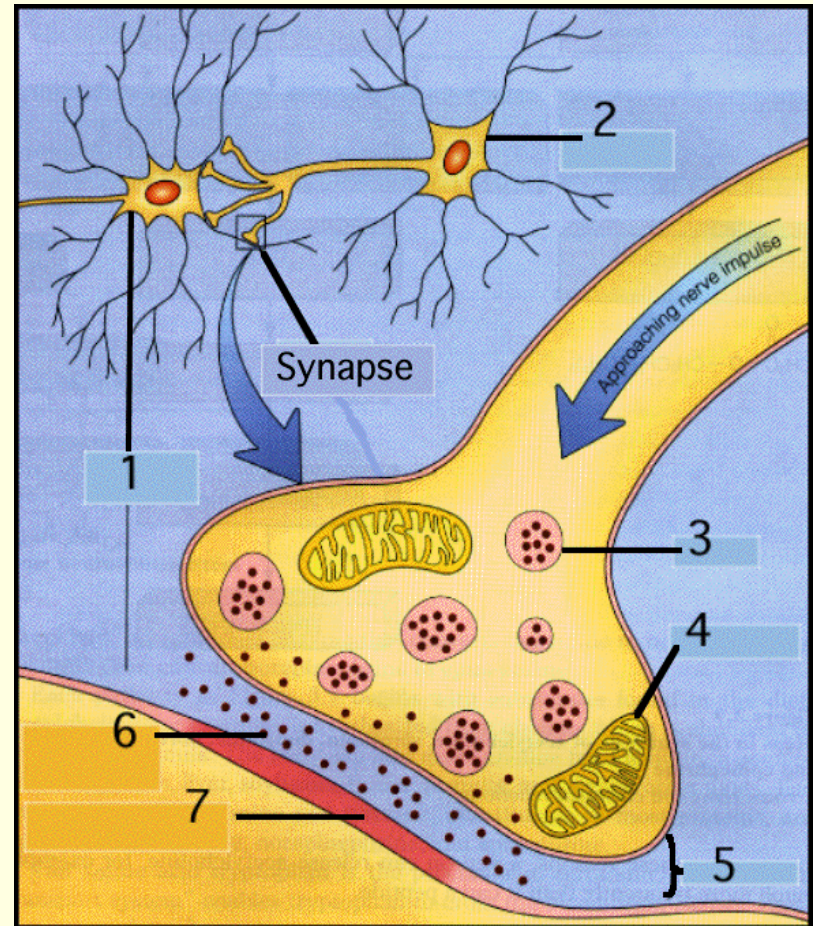
PATHOPHYSIOLOGY translated to TREATMENT

Neurotransmitters

many women report benefiting from SSRIs.

role of GABA has not been clearly defined, but some women improve with the GABA agonist alprazolam

Differences in beta-endorphin levels between the periovulatory and premenstrual phases remain unconfirmed.



PATHOPHYSIOLOGY translated to TREATMENT

Vitamins and Minerals

- No observable differences in levels of vitamin A, vitamin E, or vitamin B6
- Treatment with vitamin B6 supplements has shown inconsistent results.

PATHOPHYSIOLOGY translated to TREATMENT

Vitamins and Minerals

initial studies suggested that women with PMDD may have lower levels of magnesium, although subsequent studies have not confirmed this finding.

DIAGNOSIS

- one of the five symptoms must be affective
- **symptoms must be severe enough to interfere with usual activities and relationships** and should be confirmed by prospective daily charting for at least two menstrual cycles.

TREATMENT

Lifestyle Modifications

- **women also can try to schedule their more challenging and stressful events during the follicular phase (as opposed to the luteal phase).**

TREATMENT

■ Other Medications

- Nonsteroidal anti-inflammatory drugs (NSAIDs) effective for dysmenorrhea.
- Acetaminophen may be beneficial for pain.

PSYCHIATRIC DISORDERS IN PREGNANCY

- At least 20% of women are estimated to have a lifetime prevalence of a psychiatric disorder:
 - Bipolar Disorder ~ 1-4%
 - Schizophrenia ~ 1-2%

IT'S A FACT!

- 50% of pregnancies are unplanned
 - Pregnancy is usually noted after one missed period (patient is well into the fifth or sixth week of gestation)
- Prevalence of MDD in childbearing years is 10-15%
- 13% of women that we treat for depression either are or will become pregnant while they are taking antidepressants

It's a fact!

- No psychotropic drug has been approved for use during pregnancy
- At present, all psychotropic medications have “off-label” indications for their use in pregnant and lactating women.
- All antidepressants readily diffuse across the placenta (and are found in breast milk)

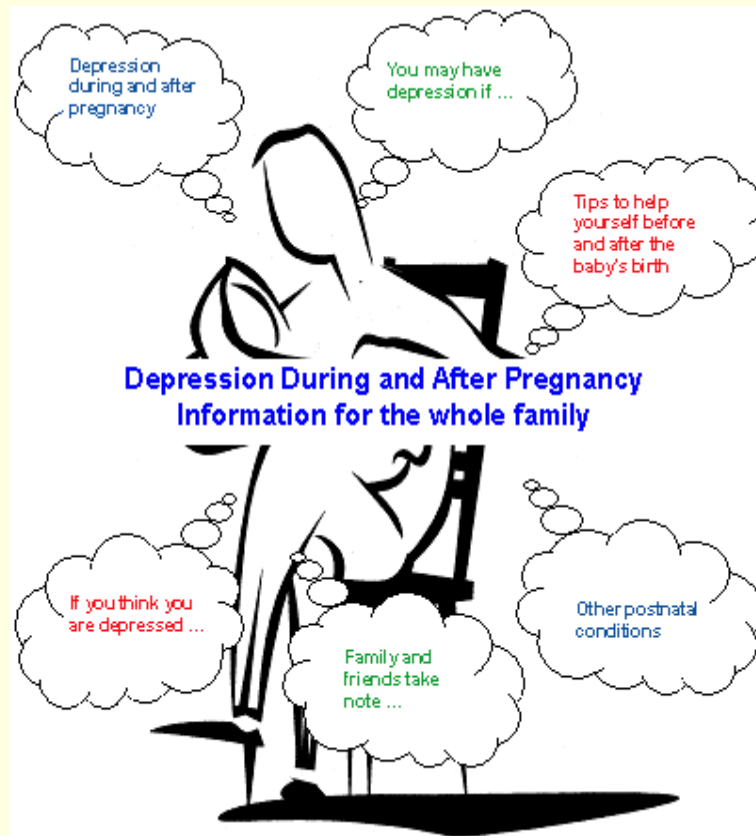
It's a fact!

- Baseline incidence of congenital malformations is 1-3%
- Organogenesis complete by 12 weeks

Risk vs Benefit

- we are vigilant regarding the known and unknown risks associated with prenatal exposure to psychiatric medications

Risk vs Benefit



- potential impact of untreated psychiatric illness on fetal well-being is more frequently overlooked

Risk of untreated depression

- self-injurious or suicidal behaviors
- inadequate self-care
- poor compliance with prenatal care
- decreased appetite (lower-than-expected weight gain)
- more likely to smoke and use alcohol or illicit drugs

Risk of untreated depression

- maternal depression itself may adversely affect the developing fetus

More risks

- association between maternal depression and factors that predict poor neonatal outcome:
 - preterm birth,
 - lower birth weight,
 - smaller head circumference,
 - lower APGAR scores

Social impact (of untreated depression in pregnancy)

- disruptions in mother-child interactions and attachment may have a profound impact on infant development
- Maternal depression can have a significant impact on the family unit.

Risks of using psychotropic drugs in pregnancy

- pregnancy loss or miscarriage
- organ malformation or teratogenesis
- neonatal toxicity or withdrawal syndromes
- longterm neurobehavioral sequelae

Health Canada

advisory: march 2006

- Newer antidepressants linked to serious lung disorders in newborns
 - Study from NEJM suggests that use of SSRIs in second half of pregnancy may be associated with PPHN
 - SSRI treatment should only be continued if the benefits to the individual patient are thought to outweigh the risks to the unborn child

What to do

- current best practice should involve a consensual process whereby patients are presented with the current knowledge, engaged in decision making, and closely monitored regardless of their choice of treatment.

Postpartum Psychosis

- Occurs in approximately **0.1% to 0.2%** of deliveries - recurrent risk **1 in 3**
- Symptoms occur rapidly within 48-72 hours of delivery
- Almost 80% (of 86 cases studied) were in first deliveries and occurred in the first two weeks of delivery
- Phenomenologically indistinguishable from manic or mixed episode

Postpartum Psychosis

- Treat Aggressively
- Inpatient care
 - Mood stabilizers
 - Benzodiazepines
 - Antipsychotics
 - ECT
 - Supportive therapy

PROTECTION VS VULNERABILITY

■ SCHIZOPHRENIA

- a small proportion may experience improvement in their psychosis during pregnancy
- chronically mentally ill women are at high risk for poor fetal outcome

Menopause

- commonly reported symptoms associated with menopause:
 - hot flushes/flushes
 - Fatigue
 - Headaches
 - Irritability
 - Insomnia
 - depression.

Menopause

- Selective serotonin reuptake inhibitors and venlafaxine have been shown to reduce hot flashes by 19 to 60 percent

Menopause

- Soy isoflavones reduced hot flashes by 9 to 40 percent
 - Some trials showed no difference from controls
- Black cohosh and red clover have had inconsistent results

Menopause

- belladonna, ergotamine and phenobarbital (Bellergal® Spacetabs)
- dong quai (*Angelica Sinesis*)
- evening primrose oil (*Oenothera biennis L.*)
 - omega-6 essential fatty acid, gamma-linolenic acid (GLA),
- Gabapentin
- Ginseng
- Mirtazapine
- Trazodone
- vitamin E
- wild yam (*Dioscorea villosa*)
 - diosgenin

Affective Illness at Menopause

- **Estrogen may ease symptoms of depression during menopause**
 - CPA Conference Highlights

Affective Illness at Menopause

- Although brain estrogenic activity seems to establish a useful role on neuromodulation and on the prevention of some psychopathologies, the conventional administration of HRT, improves the mood and menopausal female well-being, but it does not act on clinically depressed women.

Minerva Ginecol. 2003 Jun;55(3):221-31.

Sources:

- The Canadian Journal of Psychiatry, Vol 52, No 8, August 2007
 - Treatment of Perinatal Mood and Anxiety Disorders: A Review (Shaila Misri, MD, FRCPC, Kristin Kendrick, BA)
 - Perinatal Depression: Hiding in Plain Sight (Shari I Lusskin, MD, Tara M Pundiak, MD, Sally M Habib, MD)

- Psychiatr Clin N Am 26 (2003) 547–562
 - Assessment and treatment of depression during pregnancy: an update (Ruta Nonacs, MD, PhD*, Lee S. Cohen, MD)

- ‘Ask a CMA Librarian’ (Medline search)
 - Expert Opinion on Drug Safety. 6(4):357-70, 2007 Jul
 - Clinical Therapeutics. 29(5):918-26, 2007 May
 - Pharmacotherapy. 27(4):546-52, 2007 Apr
 - Paediatric Drugs. 9(2):97-106, 2007
 - Cleveland Clinic Journal of Medicine. 73(12):1098-104, 2006 Dec.
 - Canadian Nurse. 102(9):26-30, 2006 Nov
 - Annals of Pharmacotherapy. 40(10):1834-7, 2006 Oct.
 - MCN, American Journal of Maternal Child Nursing. 31(1):10-5; quiz 16-7, 2006 Jan-Feb
 - Journal of Psychiatric Practice. 11(6):389-96, 2005 Nov.
 - Canadian Family Physician. 51:1087-93, 2005 Aug
 - Drug Safety. 28(8):695-706, 2005
 - Annals of Pharmacotherapy. 39(5):803-9, 2005 May.
 - Journal of Obstetrics & Gynaecology Canada: JOGC. 26(9):819-22, 2004 Sep.