ALOHA
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The Psycho-Neuro-Endo-Immunology (PNEI) of Perinatal Mood Disorders

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PNEI:
Psycho-Neuro-Endo-Immunology

- Scientific explanation for the connection of all systems
- The effects of thoughts on the physiology
- The effects of body chemistry on the mind
Psychological

Meditation’s positive residual effects

Effects of Mindfulness Meditation on the amygdala

- Harvard University 2012 study

- Chopra.com
Psychological Effects of Kundalini Yoga on endocrine function (DHEA, Cortisol, Melatonin)


- Kundalini Research Institute.org
- JaiDevSingh.com
Psychological

Effects of Visualization Techniques on Cancer treatment

- Dr Bernie Siegel, MD “Love, Medicine & Miracles”
SSRI medications artificially increase serotonin levels in the brain, suppressing sad or depressive moods at the cost of not being able to cry when appropriate.
Physiology

**Progesterone** drops prior to menses and leads to PMS symptoms in women who are hormonally sensitive.
Physiology

Gluten Intolerance

“Grain Brain” - immunology impacted by food leading to leaky gut, leaky brain and mood issues
Important for Healing

- Hope - Optimism/ Positive Attitude, “hope for the best”
- Laughter & Love the Greatest Healers
- Faith - Confidence, Trust or Belief based on teachings
Hope & Faith

- Ancient teaching of ayurvedic medicine “Guru Charan” taught it is important that the patient believe the doctor’s treatment will work. But more important that the doctor believe that the treatment will work for the patient.

- Dr. Coue, a French pharmacist in the late 1800s also studied this idea & created the affirmation “Every Day in Every Way I am getting better and better.”
Perinatal Mood Disorders

- During Pregnancy
- Shortly after giving birth
- After cessation of breastfeeding
- After return of menses
Pregnancy Mood Issues

- Low mood due to feeling less mobile, heavy, painful legs, & swollen feet
- Exhaustion due to sleep being disturbed due to pressure of the belly and unable to get comfortable
- Anxiety about eating because of reflux due to pressure from large belly or due to morning sickness
- Overwhelmed thinking about the upcoming birth experience and increased future responsibility
“Baby Blues”

- Begins shortly after giving birth
- Feeling of sadness
- Crying for no reason
- Caused by sudden drop in Progesterone?
- Caused by emotional release of giving birth?
- Caused by realization that life is forever changed?
- Resolves without treatment in a few days or weeks
Postpartum Depression

- Begins shortly after giving birth
- Constant sad, down or "empty" mood
- Loss of interest or pleasure in activities once enjoyed
- Excessive crying
- Feeling guilty, lonely, worthless, hopeless
- Sleeping too much
- Isolation or feeling isolated
- Changes in appetite, weight gain/loss
- Decreased energy, feeling exhausted
- Loss of sex drive
- Violent thoughts
- Thoughts of death or suicide
- Estimated to affect over 900,000 women annually in the US alone
Post Partum Psychosis

- Rare condition occurring in less than 2% of women
- Delusional thoughts
- Hearing voices
- Hallucinations
- Requires immediate medical intervention
- Risk for both mother and child
- 25% rate of recurrence
Contrast with Perinatal Mood Disorders (PMD) may not necessarily include depression

- PMD can begin any time around birth, during pregnancy or beyond one year
- Often upon discontinuing breast feeding or resuming menses
- Not quite feeling the same since pregnant or giving birth is common
- Restless and irritable
- Feeling tired and wired
- Difficulty concentrating, remembering, or making decisions
- Persistent physical symptoms that do not respond to treatment such as mastitis or vaginitis
- Scary or Violent thoughts of baby being hurt
- Paranoia and Obsessive Compulsive Disorder
- The woman may not feel sad & it is not enough to ask “are you depressed?” Ask an open-ended question, “how has it been for you during pregnancy or since the baby was born?”
Who is at risk?

- Previous Episode of PMD
- Family History (mother/sister)
- Sterilization at Delivery
- History of PMS
- Treated for Infertility
- Use of Hormonal Birth Control
Why does PMD happen?

Hormonal Causes

- Low **Progesterone**: Levels decline to near zero following birth and the delivery of the placenta from elevated levels during pregnancy. Some women are hormonally sensitive and are affected by the sudden drop in Progesterone.

- Insufficient **Oxytocin** - problems with nursing and bonding

- Increased **Prolactin** Levels can cause depression

- **Thyroid** - Hypothyroidism, Low body temperature syndrome

- **Adrenal** fatigue may occur following the stress of pregnancy and childbirth

- Low **Testosterone** Levels can cause depression
Why does PMD happen?

Physical Diagnosis

- Physical conditions affect the mood
  - Mastitis
  - Slow wound healing from C section
  - Vaginal dryness
  - Pain with intercourse
  - Candidiasis
Why does PMD happen?

Disorders

- Neuro-chemical imbalances
  - Changes in neurotransmitter levels can cause PMD.
  - Treatment with targeted amino acid therapy (TAAT)

- Autoimmune Disorders
  - Hashimoto’s, Lupus, Fibromyalgia
Why does PMD happen?
Dietary Causes

- Dehydration can cause depression
- Intestinal flora imbalances can cause mood disorders
- Food sensitivities cause emotional symptoms
- Malnutrition causes exhaustion and depresses the mind
Why does PMD happen?

Situational Stressors

- Increased responsibility
- Disturbed sleep
- Physical demands
- Lack of family & community support
- Financial burdens
- Illness of child
- Marital/relationship problems
4-Step Protocol for Perinatal Health

Step 1: Restore Hormonal Balance

Step 2: Nutritional Plan

Step 3: Stress Reduction & Lifestyle

Step 4: Natural supplements & TAAT
Step 1: Restore Hormonal Balance

- **Bio-Identical Progesterone** - prescribed cream, troche, oil capsule (Prometrium), compounded capsule, sub-lingual tablet or subcutaneous pellet
  - Dosing is based upon severity of symptoms
  - Progesterone 100-200 mg at bedtime helps insomnia
  - Sublingual Progesterone 100 mg does not cause sleepiness
- **Fermented Plant Derived Progesterone** (yam) creams found in health food stores & naturopathic practitioner’s office
- **Chaste Tree Berry** (*Vitex agnus castus*) 750 mg daily
Progesterone Dosing

- **Uninterrupted** Postmenopausal, PeriMenopausal or symptoms if off Progesterone (no need to cycle)

- **Cycle Off** 3 days to 3 weeks (Days 1-21) Menstruating or PeriMenopausal Cycle On Days 4-28 as appropriate. Some women must cycle off in order to menstruate.

- **Cycle Off (alternative schedule)** PMS symptoms (headaches and moodiness) after menses begins, continue Progesterone into the beginning of cycle, then may cycle off as desired
Testosterone Topical

- Does not pass into the breast milk
- Topical use vaginally does not increase blood levels
- Testosterone for incontinence and low sexual function
  - Testosterone 1-4 mg/ml in BHRT cream: apply pea sized amount vaginally twice daily, reducing to once daily as symptoms improve, continue to reduce to minimal dose needed for symptom relief (usually twice weekly)
  - Add Estriol 2-4 mg/ml in BHRT cream for vaginal dryness
- Probiotic capsule insert vaginally at bedtime for yeast infection
Testosterone Pellet

- Bio-Identical Subcutaneous Pellet Therapy
- Systemic use will increase blood levels (blood testing pre-and post pellet required)
- Treatment for low libido
- Increased energy and stamina
- Stabilized mood swings
- Improved mental clarity
- Better sleep
Side Benefits of Testosterone Pellet Therapy

- Protects against breast cancer
- Reduces risk of Alzheimer’s and Dementia
- Protects against Osteopenia and Osteoporosis
- Reduces risk of cardiac disease
- Breast/Brain/Bone/Heart
- Contact Julie Kaanapu (541)729-9115
Thyroid

While nursing can optimize thyroid levels using natural porcine (Armour, NaturThroid, etc) or compounded bioidentical thyroid (Bio-Thyroid)

Optimal Levels TSH 1.0-2.0 and T3 (Free) 4.0-4.4

Do not use T3 therapy when nursing as T3 crosses into breast milk
Adrenals

- Anxious and exhausted “Wired and Tired”
- Salivary testing 4xs cortisol
- Sleep disturbance- test cortisol either when cannot fall asleep or when awoken and cannot return to sleep
- Avoid use of Ashwaganda and Licorice (see book for complete list of herbs to avoid when breastfeeding)
- Treat with low doses of vitamins and glandulars
Step 2: Nutritional Plan

- Whole, fresh, organic foods
- Avoid processed foods
- 8 glasses water daily (1/2 body weight in ounces)
- Mini-meals with protein
- Blood Type Diet
- Multivitamin or Prenatal if still nursing
Step 3: Stress Reduction

- Support from loved ones or groups
- Psychological counseling
- Spiritual practice
- Cardiovascular & strength training
- Yoga, breath work, sound therapy, color therapy
- Meditation/Visualization
Lifestyle Modifications

- Regular daily exercise
- Eating 3+ meals daily
- Drinking 2-3L water daily
- Sound Sleep - minimum 6 hours uninterrupted
- Avoiding alcohol and other depressants
Step 4: Natural Supplements for Balanced Mind and Body

- Targeted Amino Acid Therapy
- Botanical Medicine
- Vitamin Therapy
Step 4: Natural Supplements for Balanced Mind and Body

- Treatments for Candida Overgrowth
- Treatments for Low Body Temperature
- Weight, Cholesterol, Glucose and BP management
# PMD Treatment Comparison

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<thead>
<tr>
<th>Pharmaceutical Treatments</th>
<th>vs:</th>
<th>Natural Treatments</th>
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<tbody>
<tr>
<td>SSRI’s</td>
<td></td>
<td>Feed the body &amp; brain what it is lacking based on testing</td>
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<td>Hormonal birth control</td>
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<td>Increase neurotransmitter levels, not just block re-uptake</td>
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<td>Act as Chemical band-aid</td>
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<td>Short-term therapy &amp; lifestyle changes for long term healing</td>
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<td>Prescribed without testing</td>
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<td>Few side effects or contraindications</td>
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<td>Unknown long term effects</td>
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<td>Safety during pregnancy &amp; nursing for mothers &amp; infants</td>
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<td>Effects on fetus/ nursing baby</td>
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Untreated, Long Term Sequelae

- Increased risk of future PMS, PMD, PMDD or psychosis
- Unhappy family life
- Isolation from coworkers/friends
- Difficult menopause
- Hysterectomy
- Need for medications
- Metabolic Syndrome
Treat the Patient

Goal of treatment is to restore balance and optimize health
Case Study: 38 y.o. female

- 5 months postpartum

- Presents with
  - Anxiety
  - Depression
  - Insomnia
  - Mood swings
  - Anorexia
  - Dizziness
  - Mental Confusion
  - Recurrent mastitis & vaginal candidiasis (treated repeatedly with antibiotics and antifungals)
Case Study: 38 y.o. female

- Initial Intake & Labs
  - Blood Type
  - Female Hormone Panel
  - Adrenal Stress Index (ASI)
  - Urinary Neurotransmitter & Cortisol/Melatonin Levels
  - Urinary Heavy Metals- Pre & Post Challenge
Women’s Hormone Pre-Tests:

- Testosterone, Total
- Estradiol
- FSH
- Progesterone (Day 18-21 if cycling)
- Cortisol (am)
- DHEA
- T4, Total
- T3, Free
- TSH
- Anti-TPO
- Vitamin D
- Vitamin B12
- CBC w/o diff
- Fasting Comprehensive Metabolic
- Fasting HbA1c
- Fasting Lipid Profile
Case Study: 38 y.o. female

- Primary Treatment Plan
  - Blood Type Diet
  - 2-3 L water daily
  - Progesterone Supplementation
  - Social Support
  - Exercise 3 times weekly
Case Study: 38 y.o. female

- Restorative Treatment
  - Prenatal Vitamin
  - Amino Acid Therapy- initially 5-HTP
  - Adrenal Support- no licorice or ashwagandana if pregnant, nursing or hypertensive
  - Herbs for Sleep- caution if pregnant or nursing (see list)
  - Dietary Candida Restrictions
  - Probiotics
Case Study: 38 y.o. female

- Treatment following cessation of breastfeeding (16 months postpartum)
  - IV treatment for Candida
  - T3 Therapy for proper temperature
  - Replace Prenatal with Multivitamin
  - Heavy Metal Oral Chelation
  - Purification Cleanse annually at change of seasons
  - Increased TAAT for sleep issues
  - Add licorice for energy & low cortisol
Case Study: 38 y.o. female

Follow up:
- Retest labs annually
- Adjust TAAT dosing based on symptoms or re-test
- Complete Heavy Metal Chelation
- Resolution of Candida Overgrowth
- Normalization of Body Temperature
- Continued support: diet, lifestyle, herbs, TAAT, BHRT
References


Larson, Joan Mathews, PH.D. *Depression-Free, Naturally*. New York, USA: Ballantine Publishing Group, 1999


Available on [amazon.com](http://amazon.com) or the bookstore
Mahalo!

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