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Gut Fertility Axis - Five Element Functional Endocrinology

Chris Axelrad, M.S.O.M., L.Ac., FABORM
DISCLAIMER:
This is really, really simple. Sorry, it's not ultra-scientific or laden with big words. 😄 But it works. And it's easy. So I thought I'd share it with you. 😊 And, over the years thinking in this way, I've found it to be amazingly effective (i.e. A good number of pregnancies where it seemed nearly impossible).

FREE videos and downloads related to this and other topics in integrating TCM and Functional Medicine:

functionaltcm.org

BODY FLUID (WATER) IS A CRITICAL DETERMINANT OF EGG QUALITY
THE ENDOMETRIAL BOUNDARY IS A KEY COMPONENT TO IMPLANTATION AND ONGOING PREGNANCY

Interesting, isn’t it??

Nature’s Mind Map

5 Element Functional Endocrinology
Chris Axelrad, M.S.O.M., L.Ac., FABORM
Gut / Metal Element

- Boundary (Lung / Large Intestine) – "Wei Qi"
- "Gut immune axis"
- Inner skin exposed to outside world via intake of food
- A continuous mucous membrane from cranial sinus cavities and ears all the way to rectum
- Fluid boundary
  - Excretion
  - Mucus
- Mother of Water
  - Gut / adrenal axis
- Gut / brain axis
- Controls Wood
  - Hepatic portal system

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Think about this… Metal / Boundary / Protection

- Barriers:
  - Blood - brain barrier
  - Blood - testis barrier
  - Blood - follicle barrier
  - Blood - gut barrier
  - Blood - lung barrier

Barriers are barriers are barriers – they all fall under the body’s sphere of survival, self-protection, and keeping things in their proper place.

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Other functional relationships

- Lung / Large Intestine relationship
  - "Gut immune axis"
- Metal (Large Intestine / Lung) is mother of Water (Kidney – Marrow / Brain)
  - "Gut brain axis"
  - "Gut adrenal axis"
- Kidney Yin – Liver Blood relationship
  - Adrenal / Cortisol → Liver / Glycogen
- Liver – Spleen relationship
  - Hepatic role in metabolic syndrome / insulin resistance

In other words – they figured this stuff out a long time ago.

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The disseminated effects of unhealthy gut barrier (damage to Metal)?

- Serotonin/mood disturbance
- Adrenal/sympathetic up-regulation
- Hepatic portal system overload
- Chronic inflammatory cascade
- Poor or diminished nutrient absorption
- Alteration of insulin/glycemic dynamics

Serotonin/mood disturbance

- Sleep issues
- Difficulty relaxing
- Appetite regulation disturbances
- Effects on dopamine/pleasure axis
- Brain fog/concentration issues

Adrenal/sympathetic up-regulation

- Over-emphasis of sympathetic NS function
- Immune system down-regulation (conflicting signals)
- Difficulty resting/sleeping/relaxing
- Altered circulatory patterns – do not favor reproductive system/uterine artery
- Eventual adrenal fatigue/possible depletion of DHEA, pregnenolone
Gut Fertility Axis - Five Element Functional Endocrinology

**Hepatic portal system overload**
- Liver’s methylation and glucuronidation pathways disrupted
- Possible estrogen dominance and thyroid involvement
- Vicious inflammatory cycle – overabundance of inflammatory cytokines
- Possible damage to liver tissue and elevation of liver enzymes
- Disruption of liver’s glycogen mechanics – increased cortisol PLUS increased energy demands within liver itself
- Potential autoimmune trigger

**Chronic inflammatory cascade**
- Up-regulates cortisol release – adrenal axis overstimulation
- Adrenal overactivity can cause the infamous “pregnenolone steal”
- Also can deplete DHEA reserves and alter steroidogenic pathways
- Chronic immune dysregulation – possible effects on uterine barrier/clotting potential/homocysteine levels/CRP (remember, inflammation thickens the blood)
- Effects on CNS / brain that are not helpful for HPO axis – cortisol / LH / prolactin relationship
- Continual stimulation of cell-repair processes deplete or divert growth factors and collagen precursors essential to reproductive health, connective tissue function

**Poor or diminished nutrient absorption**
- Inability to process foods properly
- Difficulty with absorption of minerals, metals (i.e. zinc, iron, selenium) due to gastritis / enzyme issues
- Possible proteolytic enzyme deficiencies
- Biliary insufficiency due to hepatic overload – poor absorption of fats
Alteration of insulin/glycemic dynamics

- Chronic cortisol up-regulation alters blood sugar levels
- Stress on glycogen stores
- Stress on insulin-producing and insulin-sensitive tissues
- Brain effects
- IGF dynamics changed

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So, what the heck does any of this have to do with fertility?

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In a nutshell... EVERYTHING.

- Kidney/Water axis - Adrenals/CNS - steroidogenesis, activation of energy reserves, immune regulation, growth factors
- Liver/Wood axis - Hepatic Portal System - hormone clearance and detox, energy storage, cholesterol regulation
- Heart/Fire axis - Circulatory/Thyroid - sustained metabolic power, movement of resources, thyroid function
- Spleen/Earth axis - Pancreas/Lymph/Metabolism - transformation of food into particles for cellular function, lymph/body fluid dynamics, insulin output/response, stabilization of blood sugar/metabolism
- Gut/Metal axis - Immune/Barrier System - boundary between self and not-self, entering/exiting, barrier tissues, immune strength and coordination

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5 Element Functional Endocrinology
Chris Axelrad, M.S.O.M., L.Ac., FABORM
But, it’s really not that complicated.

<table>
<thead>
<tr>
<th>Functional Pattern</th>
<th>TCM Patterns</th>
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<tbody>
<tr>
<td>Serotonin / mood disturbance</td>
<td>Disturbance of Shen, Liver Qi Stagnation</td>
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<tr>
<td>Adrenal / sympathetic up-regulation</td>
<td>Heat disturbing Heart, Liver</td>
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<td></td>
<td>Kidney Yin / Liver Blood Deficiency</td>
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<td>Hepatic portal system overload</td>
<td>Liver Qi Stagnation, Damp Heat</td>
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<td>Liver in invading on Spleen</td>
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<td>Chronic inflammatory cascade</td>
<td>Heat, Blood Stasis, Blood Heat</td>
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<td>Poor or diminished nutrient absorption</td>
<td>Stomach Heat, Spleen Qi Blood Deficiency, Spleen Blood Deficiency</td>
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<tr>
<td></td>
<td>Liver Qi Stagnation</td>
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</tbody>
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Gut Fertility Axis - Five Element Functional Endocrinology

In other words...
YOU KNOW THIS ALREADY.
And YOU KNOW HOW TO TREAT IT.

Here’s the key:
You don’t have to fix anything.
The system has the entire blueprint.
You simply have to find the source of the stress, clear the blockage or bolster the deficient tissue...

AND EVERYTHING ELSE HEALS.
(Are you feeling a little relieved?)

Gut Fertility Axis - Five Element Functional Endocrinology
AND SECOND. JUST AS IMPORTANT.
In USA and Westernized cultures, the dominant pathologies are Qi Stagnation (Unhealthy Functional Looping) and Heat (Inflammation) which THEN cause depletion.

Working too much, eating too much sugar, processed foods; chronic unmanaged stress, lack of sleep... Excess is primary, depletion is secondary to this.

Do not be fooled into simply tonifying kidneys.

Differentiation of Metal Element Root Pattern

- ALWAYS : Some type of unhealthy bowel pattern
  - Infrequent – most common and often relatively asymptomatic
  - Loose
  - Painful
  - IBS-like symptoms – more cramping
  - Reactivity to “certain foods” – esp. rich, spicy, dairy, flour

- OFTEN :
  - Upper GI issues
  - Indigestion / reflux
  - Frequent or chronic allergy (skin, sinus, food)
  - Depression

Key story element:
“*I’ve always had problems going to the bathroom*
“*I’ve never been regular*”

Treatment of Metal Element Root Pattern

Treatment strategy:
- #1 Priority - Support integrity of gut tissue (mucoid tissue)
  - NAC – if more heat/inflammation signs
  - L-Glutamine – if more fatigue / deficiency signs
  - Proteolytic enzymes – assist healthy gut function, anti-inflammatory effects
  - Probiotics – if stools not well-formed
  - Hi-Lignan Flax

- #2 Adrenal support
  - Adaptogens (Ashwagandha, American Ginseng, Astragalus) – ALWAYS.
  - Inositol – if unstable energy / energy swings
  - B-Complex – always (low to moderate dose)

- #3 Liver support
  - NAC
  - Hi-Lignan Flax
  - Chinese herbal formula that fits liver pattern (is there heat, blood stasis, etc.)
Diet/Lifestyle Recommendations for Metal Element Root Pattern

- Eliminate wheat flour (not gluten unless proven celiac)
- Eliminate animal dairy
- Paleo-style animal protein/vegetable diet
- Avoid overconsumption of beans, fruit, sucrose
- Low caffeine
- 8-10 hours of sleep
- No meals within 2 hours of bedtime
- Balance between raw/cooked
- Careful with spicy/oily/cold/greasy

References
