Overweight and Overworked: Assessing and Addressing the Hormone Imbalances of the mid-forties male

Presented by: Carrie Jones, ND, MPH
Disclaimer:

• Medical Director, Precision Analytical, Inc.
• I have no financial ties to any medication or supplement company
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Objectives:
Upon completion of this case study, participants will be able to:
- Understand how to hormonally evaluate male patients
- Understand how genetics play a role in hormone regulation
- Understand how diet/lifestyle/epigenetics plays a role in hormone regulation
Chief complaint:
1. Weight gain of 25lbs in 1 year
2. Increasing fatigue
How many of your patients list these as their top 2 complaints?
Other Symptoms:
1. Weight gain
2. Fatigue
3. Digestive issues – bloating, diarrhea alt. constipation
4. Joint pain – knees, feet, shoulder
5. Sleep – often wake too early/can’t stay asleep
He’s an inflammatory mess, right?
History/Family history:

1. Allergies and asthma since young childhood
2. Mom/dad/all 3 brothers have hypothyroid
3. Mom has type 2 DM, youngest brother has type 1 DM
4. Depression/anxiety runs in the family
5. Daughter probably dairy intolerant per mom
Review of Symptoms:

**HEENT** - prone to stress headaches, distance vision worsening, nose often congested/irritated, hard wax will impact and need removal, clears throat often, tight muscles up neck into head

**Heart/lung** – no heart complaints, asthma/SOB/wheezing a few times/week, has inhaler

**Abdomen** – bloating after meals especially at night, gas, belching, heartburn, diarrhea

**Male health** – decreased libido in last year, no erection issues, no prostate issues

**Skin/hair** - hands and feet now cold often, hair: no loss/thin, some acne break out on upper back

**M/E** – more stress, death in the family, job stress, not motivated like before

**Meds** – Nasonex prn, Claritin prn, Allegra prn, tums regularly
Other noteworthy info:

- stressful job requiring a lot of travel and eating out
- fast food, energy drinks, sugary treats
- reported ‘doesn’t do much dairy’ but drinks 1-2 grande mochas daily
- doesn’t chew his food – eats very quickly
Physical Exam Key Findings:

- Distended abdomen, mildly tender to palpation all over, increased bowel sounds all quadrants
- Mild acne noted on back of the neck and upper back
- Hands and feet cold to touch – no edema in lower extremities
- Mild wheezing noted bilaterally in lower and middle lobes, clear with cough, maxillary sinuses do not trans-illuminate well, cobblestoning in posterior pharynx (mucus)
- 6’3” and 245#
Labs (from another Doc):

- Fasting glucose = 87 mg/dL
- Fasting insulin = 7 uIU/ml
- CBC = WNL
- Vitamin D = 11
- TSH = 1.1 mIU/L
- Free T4 = 1.0 mcg/dL
- Free T3 = 3.1 mcg/dL
- TPO and TgAb = negative

- Homocysteine = 13
- Cholesterol markers = WNL
- Triglycerides = 112
- Ferritin = 42 ng/ml
Hormones:

Low DHEAs
(Fatigue, low motivation, less anabolic)

Elevated E1, E2
(Fatigue, weight gain, breast development, moodiness)

Elevated 5 alpha
(Moody/irritable, prostate issues, male pattern baldness, acne)

Poor methylation
(lots of issues but here estrogen ‘builds up’)

Downstream androgens okay
Adrenals:

He’s very catabolic!

Elevated metabolized (total) cortisol
(Increased by: long term stress, inflammation, infection, pain, obesity, insulin issues, hyperthyroid or too much thyroid medication)

Elevated Free Cortisol
(Causes sleep issues, fight/flight, worsens anxiety, weight gain)
Massive snafu → the lab threw out his test samples
(don’t even get me started)
Note: I got the blood work, and hormone testing back prior to genetic testing therefore there is a part 1/part 2 treatment plan
Primary hormones (in CAPS) are made by organs by taking up cholesterol and converting it locally to, for example, progesterone. Much less is made from circulating precursors like pregnenolone. For example, taking DHEA can increase testosterone and estrogen, but far less than it is made by the testes or ovaries respectively.

Steroid Pathways

Other factors affecting the production of primary reproductive and adrenal hormones:
- Increased Cortisol: Stress, Inflammation, Cushing's Disease, obesity
- Increased DHEA: PCOS, acne, weight loss, Varicose veins, migraines, sleep, stress, and anxiety
- Increased Testosterone: PCOS, HCG, HGH, LH, Dopa, Clomiphene Citrate (Clomid)
- Increased Estradiol: PCOS, inflammation, pregnancy, DHEA/testosterone supplementation
- Increased Estrogens: Hormonal birth control, ovulation failure (amenorrhea), obesity, anorexia, and diabetes

Information on the chart is educational purpose only and is not a substitute for the application with any of the listed items. References available upon request.
Q: Does he need DIM?
Genetics ➔ Estrogen Phase 2:

**Methylation — MTHFR, MTR & MTRR**

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Genetics → methionine

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Methylation — BHMT (Betaine homocysteine methyltransferase)

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Methylation — AHCY (Adenosyl homocysteinase)

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Figure 1. Overview of the five mitochondrial complexes of the OXPHOS.
Genetics → IgA

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At risk for leaky gut and food sensitivities = inflammation
Detox organophosphates, nerve agents, pesticides

Mutations assoc with graves, Hashimotos, celiac, DM and lupus

Assoc. with celiac
Assessment of findings:

1. Hormonally challenged
   - Low DHEA-s
   - High estrogens
   - High 5a reductase
   - High cortisols

2. Digestive/food issues

3. Methylation issues

4. Mitochondrial issues

Inflammation
Bottom line…
Treat the patient

Duh.
Treatment Part 1:

1. Dairy and gluten free diet (shocker 😲)

2. Critter killer: Oil of Oregano, Berberine, Wormwood, Artemisia..etc) – I treated presumptively

3. “Band-Aids” to help while lowering overall inflammation:
   - DHEA 25mg in am
   - mixture of Saw palmetto, Nettle and Pygeum (↓5a reduct.)
   - mixture of Magnolia, Skullcap, and Zizyphus qhs (↓ 11bHSD1)
   - mixture of Polymethoxylated Flavones (↓ 11bHSD1) and Tongkat Ali (↑ free T which he didn’t need but whatever)
   - use DGL instead of Tums
Initial Results:

- Lost about 15 lbs in 3 months
- Switched from milk to coconut milk in his mochas = less diarrhea, less bloating, less mucus
- Loved the DGL – works great, feels better from heartburn
- Not entirely gluten free (yet) – difficult at restaurants/traveling
- Didn’t notice any difference (good or bad) with critter killer supplements
- Minor improvement in energy
Treatment Part 2:

1. Add in Methyl B12 and hydroxyl B12/B-vitamins
2. Add in Ubiquinone
3. Stay gluten/dairy free
4. Stay on magnolia/skullcap/zizyphus/PMF supplements
4. Don’t repeat critter killer
5. Finish out Saw palmetto/nettle/pygeum
6. Add in Saccharomyces Boulardii/stay on DGL
7. Add in Betaine HCL with each meal (not sure why I didn’t do this initially)
8. Add in Seaprose-S enzyme 2 on empty stomach = ↓ mucus and biofilm
Follow-Up Results

→ Losing weight again (this will be ongoing)
→ more energy so working out more, feeling less joint pain
→ less bloating, less heartburn unless cheats
→ sleeping well unless has a lot of stress then mind races
→ feels less mucus/clears throat less but still mildly snoring
therefore sent for sleep study and awaiting results
Key Insights:

→ Treat the patient!! But keep in mind you can lead a horse to water…he would do even better 100% gluten and dairy free.
→ I wish I had the stool test results for more insight – I’m considering doing it again
→ Inflammation and stress affects every aspect of the body!
Thank you for listening!

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References:


