

Patient: Date: Wednesday 30<sup>th</sup> January 2019

## **Comments:**

- You are complaining of "constant fatigue and constant bloatedness" since you have delivered your son in . . Given that you have been treated with steroids to support IVF protocols, as a response to high Natural Killers and high cytokines, I have explored a number of autoimmune markers. You present elevated anti-GAD autoantibodies, which systematically leads me to request thorough gluten exclusion.
- > You may feel that you already take small amounts, but that does not really help fighting autoimmunity. Functional Medicine approach to autoimmune issues relies on restoring intestinal health, especially by optimizing gut lining that gets porous in presence of **gliadin**, a key protein belonging to **gluten** complex.
- You precisely express elevated LPS-Binding-Protein, which shows an excessive presence of endotoxins in the gut, which are linked with intestinal permeability. Zonulin, another 'leaky gut' marker shows a bit high, whereas its secretion by enterocytes is triggered by gliadin intake. Besides zero gluten diet, you should avoid all other grains such as rice and corn (to which you react), hot & spicy foods, and alcohol.
- No wonder that you badly react to **wine** because **alcoholic beverages** do not fit you at all, as suggested by abnormally high gamma-GT enzymes, which by the way reflect oxidative stress. Additional dietary modifications result from your apoE genotype, given that presence of an E4 allele significantly increases predisposition to cardiovascular diseases and neurodegeneration from consuming high **cholesterol** foods.
- These encompass three staple foods: **coconut oil** (usually recommended for autoimmune patients but certainly not if E4), **red meat** (especially **beef** to which you react), and **dairy products**. Anyhow, those 3 foods are repetitively flagged by several biological tests, would it be lipid profile or fatty acids status.
- > On top of that, you suffer from a genetically driven **lactose** intolerance, not surprisingly given ethnicity. Finally, in order to rebalance your intestinal microbiota, you must refrain from consuming **fast sugars** as we keep in mind the *gestational diabetes*, which predisposes you to develop prediabetes later in life.
- To help you manage such changes, I suggest you see my nutritionist who will provide a nice eating-plan.
- Another genomic finding influences our management, i.e. suboptimal DIO2 'TA' genotype not allowing you to convert thyroid prohormones T4 into active hormones T3 as well as patients with the so-called wild type. Combined with stress that also blocks T4 to T3 conversion, you present low urinary T3 level, plus quite high blood reverse T3 that counteracts active T3. Taking gentle glandulars GTA will help you compensate, as I blame low T3 for many complaints such as fatigue and not waking-up feeling energized.
- During our initial meeting, we both suspected low adrenal function based on fatigue, low blood pressure, and lack of motivation. Indeed, low blood pregnenolone, precursor to all human steroids, triggers lack of cortisol (see urinary metabolites from 17-OH-steroids) and progesterone (cause of thin womb lining?). I thus prescribe compound capsules to replenish pregnenolone, food supplement in the US but not here.

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