

Patient:

Date:

Wednesday 3rd April 2019

Comments:

- You have been diagnosed with two autoimmune conditions, *pernicious anaemia* for which you receive IM injections of vitamin B12, and *Hashimoto's disease* leading to underactive thyroid for which you receive 75 mcg of L-thyroxine. You still present numerous complaints likely resulting from low thyroid function, which probably explains huge fluctuations in the levothyroxine dosage as you have taken up to 175 mcg.
- My view based on this comprehensive biological assessment rather blames severe lack of active thyroid hormones T3 noticeable in blood (where low T3 gets worsened by excessive reverse T3) and especially in urine (even taking into account unfortunate incomplete 24-hour urine collection). The unsatisfactory conversion of thyroid prohormones T4 into active T3 results from variant DIO2 genotype and huge stress.
- Stress besides explains cortisol overuse leading to low urinary metabolites as 17-OH-steroids (still taking into account incomplete urine sample, which we did recalculate from urinary creatinine level), plus to exhaustion of cortisol precursor, prohormone pregnenolone. Your complaints - chronic fatigue, weight loss, insomnia, mood swings, anxiety, depression, “*no energy*” - likely also reflect low adrenal function.
- The best move forward can consist in this 4-month therapeutical trial based on prescribing safe amounts of liothyronine/T3 (10 mcg daily split because of short T3 life) to support thyroid and of pregnenolone (from daily compound capsules, despite being a food supplement in the US) to support adrenal function.
- My typical thyroid management besides consists in optimizing conversion from T4 in T3 with: a) cofactors such as selenium (SEOSJ), zinc (ZNIPY), magnesium (MGDPY), and iron (FELPE); b) two Ayurvedic herbs (*Commiphora mukul/CMNPY* and *Withania somnifera/SKNOV*). Plus, let us not neglect additional thyroid cofactors such as vitamin A (XA4SJ), vitamin B2 (VB2TR), and a touch of iodine from natural mix SKNOV.
- Given the thyroid disease's autoimmune origin, I implement a bespoke anti-autoimmune strategy based on certain supplements (N-acetyl-cysteine/NCKPY as glutathione precursor and fish oil/EPA6 as source for significantly deficient long chain omega 3 fatty acids) and on strict **gluten-free** diet. Removing all **gluten grains** aims at reducing intestinal permeability, which triggers autoimmunity and is demonstrated by excessive endotoxins/LPS implying gut inflammation, ‘*leaky gut*’, and *intestinal dysbiosis*. It justifies an intestinal treatment combining powerful probiotics (EDMOB) as well as two remarkable antimicrobial, antioxidant, and anti-inflammatory phytonutrients, namely *curcumin* (CQHPY) and *berberine* (BBTPY).
- The FUT2 homozygous variant genotype (weak gene version inherited from both parents) does not allow you to protect your gut by binding fucose to its lining, which also requests more intensive management through stronger probiotics dosage and regular cleanses based on berberine (antifungal & antibacterial).

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