

Patient:

Date:

Thursday 7<sup>th</sup> March 2019

**Comments:**

- You have come for a consultation within the scope of Functional Medicine regarding two complaints: *arthritis* noticeable through imagery (“*bone structure 10 to 15 years older than your age*”) and through painful joints; need to lose weight, as you consider that you are about 20 kilos overweight, now 85.1 kg.
- You are despondent regarding weight loss given that you “*eat sensibly*”, plus you train regularly with a personal trainer. I also underline that you are obviously not lying about your dietary efforts, as markers for carbohydrate metabolism as well as cholesterol levels show perfect. Usually, if discrepancy appears between what patients pretend doing about weight management and its outcome, they are not trusted.
- I find this typical health care professionals reaction as appalling. Thus, I always search for explanations and here, not surprisingly, I have found two genomic polymorphisms bringing much light in the mystery! The first one concerns conversion from thyroid prohormones T4 into active hormones T3 by DIO2 gene. Your homozygous variant genotype ‘AA’, which means you have inherited the weak gene version from both parents, does not allow optimal secretion of T3. That genotype has been associated with obesity.
- Low blood T3 level and very low urinary T3 level confirm the issue and justify a compensation based on non-prescriptive gentle glandular GTA, to be taken three times a day given short T3 life. Besides, two critically important conversion cofactors are missing, i.e. selenium (SEOSJ) and zinc (ZNIPY). We rely on replenishing two more thyroid cofactors: iodine needed for hormones (IDWPY) and vitamin A (XA4SJ).
- Thyroid function works in close synergy with adrenal function, which shows severely weakened here. I am slightly perplexed due to your claim, “*not much stress*”, but we should perhaps see it as ‘*pressure*’ rather than emotional stress. The fact is that such *stress* does worsen T4 to T3 conversion beyond your genotype, plus it ruins adrenal prohormones DHEA and pregnenolone. The latter represents compulsory precursor to all natural steroids in humans and, in particular, to DHEA, to progesterone, and to cortisol.
- I therefore prescribe compound capsules based on pregnenolone (not to be confused with prednisolone), very safe when you need more and even seen as a food supplement in the US. That should improve your progesterone, which I dislike being so low given that it brings many benefits to hysterectomized women.
- I have not said that your diet should be seen as perfect. Biological results demonstrate that you should implement a **grain-free** diet because you react to **gluten** with IgA antibodies (in fact to **gliadin** belonging to the **gluten** complex), plus to **rice** and **corn** with IgG antibodies. You should also refrain from eating **hot & spicy foods** (*what burns the mouth burns the gut*), **beef** (containing pro-inflammatory arachidonic acid), and **fast sugars**. These include **high-fructose fruits** (**apples**), **honey**, plus to some extent **wine**.
- I conclude with second relevant genotype OGG1 ‘SC’, implying **intermittent fasting** will show hugely beneficial in your case, i.e. making sure to extend overnight fasting time to 16 hours (two main meals)!

Georges MOUTON MD