Thyroid Disease and the Role of Iodine and Selenium

The thyroid gland is a bilobed gland (two sides) which sits in your lower neck right above your clavicles. Hypothyroidism is VERY COMMON in menopause and is overlooked by your primary care doctor when your labwork comes back as “normal” according to the doctor. A thyroid profile consists of a TSH, thyroid stimulating hormone, free T4, thyroglobulin, and free T3, triiodothyronine.

If you have just been diagnosed with hypothyroidism, your thyroid is underactive. Most physicians, including endocrinologists will not treat hypothyroidism unless your TSH or thyroid stimulating hormone is 4.5 or higher. THE HIGHER YOUR TSH, THE WORSE YOUR HYPOTHYROIDISM.

In our practice we begin to treat hypothyroidism when your TSH is 2.5 or above. This is called subclinical hypothyroidism. You have all of the symptoms of hypothyroidism ie weight gain, often rapid; hair loss, loss of the lateral third of your eyebrows, constipation, feeling cold when others are hot (this is not a hot flash, it is your basal body temperature that is under 98 degrees); and sometimes swelling of the eyes, hands and feet.

Your doctor will perform a complete thyroid exam on you which may include a thyroid ultrasound, looking for signs of Hashimoto’s Thyroiditis (an autoimmune disorder in which the body attacks the thyroid and tries to shut it down) or thyroid nodules, which are an accumulation of T4, thyroglobulin in the thyroid gland. Thyroid nodules need to be biopsied when their size reaches one centimeter or more.

Treatment for hypothyroidism consists of Synthroid, the brand name, Levothyroxine and Levothroid which are the generics. The problem with the generic substitution for Synthroid is that they tend to lose their potency when they sit on the shelves in pharmacies. An alternative to Synthroid, which only contains T4, is Armour Thyroid, a porcine thyroid derivative
which contains T4 and T3 in a three to one ratio. Armour Thyroid mimics are own thyroid hormone almost identically. Westhroid and Naturethroid are other medications which contain both T3 and T4. They are not necessarily “more natural” as they can contain synthetic T3 and T4 or contain a porcine (pig) derivative such as Armour thyroid.

When there is a conversion problem from T4 to T3, Iodoral (potassium iodide) 12.5 mg and Selenium, 200 mcg should be taken as supplements to increase the conversion. The enzyme known as 5’ deiodinase which pulls an iodine molecule from T4 and converts it to T3 needs both of these supplements to do the job. The typical American obtains approximately 220 micrograms of selenium from the diet. The typical Japanese person obtains 13 MILLOGRAMS. Notice they obtain FORTY TIMES more than the average American. They obtain iodine from the kelp, seaweed and fish that they eat every day. Approximately 95% of all Americans are iodine deficient. Do you have cold hands and feet all of the time, even during hot summer months. You are iodine deficient. The endocrine organs with the highest levels of iodine are #1 thyroid, #2 breasts, #3 ovaries, #4 uterus and in men the prostate gland. You are protecting these organs from potential cancers with iodine supplements.

One caveat to using iodine as a supplement is in people with Hashimoto’s Thyroiditis and who do not have a thyroid at all due to a thyroidectomy. You must take Iodoral with selenium to avoid an overactive thyroid or hyperthyroidism. This happens rarely, but the symptoms include heart racing, tachycardia, fainting, lightheadedness, and rapid weight loss.