



ASHEVILLE INTEGRATIVE MEDICINE

James Biddle, M.D.

Thyroid Disease: Undertreated and Underdiagnosed

Anne Walch, PA-C

An underactive thyroid gland can wreak havoc upon one's physical and mental well-being. The thyroid gland, a butterfly-shaped gland at the base of the throat, produces hormones that regulate the basic metabolic rate of every cell and organ in the body. Even a slight deficiency of thyroid hormone can cause problems ranging from fatigue, weight gain and dry skin, to constipation, cold intolerance, achy joints, and depression. Low thyroid function has also been linked to heart disease, impaired immune function, IQ deficits, carpal tunnel syndrome, and fibromyalgia.

Unfortunately, many people with an under-active thyroid are undiagnosed or under-treated. The Archives of Internal Medicine, February 28, 2000, reports that 13 million Americans may be unaware of and undiagnosed for their thyroid conditions. In addition, the study found that forty percent of hypothyroid patients who were taking thyroid medication still had abnormal thyroid labs.

The conventional medical diagnosis of an under-active thyroid, named "hypothyroidism", relies on blood tests of "thyroid stimulating hormone" (TSH) and "free thyroxine" (T4). In general, if the TSH is > 5.5 (normal range is 0.5 to 5.5), and if the T4 is < 0.7 (normal range is 0.7 to 5.0), hypothyroidism is diagnosed and medication is prescribed in the form of replacement synthetic thyroxine (brandnames: Synthroid, Levoxyl, Levothroid).

A person may have multiple symptoms of hypothyroidism, but if their lab values are not out of range they will typically remain undiagnosed and untreated. Thyroid specialists are beginning to question the optimal range of thyroid lab values. Rather than accepting a TSH value up to 5.5 as normal, some specialists prefer to keep their patient's TSH < 2.0 . These specialists are treating their patients based on the patient's symptoms, as well as more liberal interpretations of thyroid labs. A thyroid specialist will also consider other thyroid labs (free T3 and autoantibodies) when evaluating a patient for hypothyroidism.

Many people who are diagnosed as hypothyroid and whose treatment has returned their lab values to normal still complain of hypothyroid symptoms. This is because the standard medication for hypothyroidism (levothyroxine, or T4) is not adequate for a subset of hypothyroid patients. In humans, T4 must be converted in the body to T3, a thyroid hormone several times more potent than T4. Some people's bodies can not make the conversion from T4 to T3 well, and thus their cells and organs are not receiving 'the real thing', the most potent thyroid hormone, T3. In effect, many hypothyroid patients who only take medication with T4 are still hypothyroid at the cellular level.

The February 1999 New England Journal of Medicine reported that a majority of hypothyroid patients felt better on a medication that included T4 and T3, compared to solely T4. Interestingly, the most dramatic results of adding T3 were the positive effects on patient's mental functioning. Standard T4 therapy can be supplemented with T3 in a synthetic form (Cytomel), or in a time-release form compounded at a pharmacy. Thyroid specialists will often use a T4/T3 combination such as Thyrolar, the synthetic version, or the natural T4/T3 combination from desiccated natural thyroid (Armour, Westroid).

If you suspect you are hypothyroid, or you are already diagnosed with it but feel there is room for improvement in your treatment, please find a practitioner who can properly assess and guide you towards more optimal thyroid function. The proper medication in the proper doses, along with the right nutrients can do wonders for your mental and physical well being.