Hypothyroidism - The Many Myths

Thyroid disorders are extremely common and, in my opinion, are often undiagnosed or poorly treated due to a total reliance on laboratory testing and some-long standing but fundamentally flawed principles of treatment. Of the many standard teachings in this area, I believe the most common mistake physicians make in every day practice is to "rule out" hypothyroidism on the basis of laboratory tests .alone, especially use of the TSH (thyroid-stimulating hormone)test. There are few teachings in medicine more sacrosanct than an elevated TSH test as the "gold standard" for a diagnosis of hypothyroidism. I believe that there are millions of patients (mostly women) who would benefit from thyroid hormone but who are not treated because of results from this test.

A common story in popular magazines is "The Diagnosis your Doctor Will Probably Miss". The story is that many individuals (mostly women) with symptoms like fatigue, depression, muscle aching, constipation, etc., see a physician who orders a T4 test and, on the basis of this, are told that hypothyroidism has been "ruled out". The "smarter physician" also orders a TSH test because this is more sensitive and often reveals an abnormality even when T4 results are normal. While this scenario can happen, I believe it is far more common to find both T4 and TSH tests registering normal in the face of significant clinical hypothyroidism. In my practice, if the medical history and physical findings are highly suggestive of hypothyroidism, patients are treated with a therapeutic trial of the hormone and the results are overwhelmingly positive. As of early 2001, opinion in this field is still that the TSH test is absolute, although the upper limit of normal has been questioned, which is starting to include more individuals in this diagnosis.

Another common teaching that I believe to be fundamentally wrong is that all treatment should be done with 1OO% T4 hormone L-thyroxine (Synthroid, Levoxyl, etc.). The normal secretion of the thyroid gland contains small amounts of the T3 hormone (triiodothyronine) and I believe that giving some T3 is an important part of effective treatment for most individuals. The standard medical view is the T3 is unnecessary because T4 is converted to T3 in the body. But many patients taking the standard 100% T4 hormone report chronic fatigue, depression, menstrual abnormalities, fibromyalgia, irritable bowel syndrome (IBS), restless legs and other

complaints, and these complaints are almost always better when some T3 is added. This particular teaching in medicine has been breached by a paper appearing in the New England Journal of Medicine in 1999 in which patients on standard 100% T4 were given some T3 and all patients felt better mentally and physically. The use of T3 has been standard in my practice since 1990 and I am quite sure it will be routine in the near future, although many physicians at this point still do not use T3 in addition to T4.

Thyroid hormone activity has a variety of complicated interactions with other hormones. For instance, I believe that thyroid hormone treatment is effective in PMS (premenstrual syndrome) despite the fact .that there are major studies in the literature which say this is not true. It is most likely that PMS fundamentally represents a deficiency of progesterone production prior to menstrual flow, but I believe that normalization of thyroid deficiency enables the woman to make more progesterone, thus relieving the symptoms. The woman in her mid-forties who is just starting to have irregular periods and notices some hot flashes, sweats and sleep disturbance at night can often be treated simply by optimal thyroid replacement, specifically including some T3. While such symptoms are commonly regarded as estrogen deficiency and will respond to the use of estrogen, I find that many such women have normalization of symptoms on proper thyroid therapy alone. The fundamental reason for this may well be that normalization of thyroid function enhances estrogen production by the ovaries themselves and by, the increased production of estrogen in fat tissue from adrenal hormone precursors.

If a woman at this age has frequent migraine headaches that are clearly related to the menstrual cycle (essentially premenstrual), these will often respond to balanced T4-T3 treatment, again possibly because of raising and/or stabilizing levels of estradiol. While clinical depression is not an integral part of menopause, there are many issues at this time of life that can cause emotional upset or depressed feelings. Again, use the T3 hormone in a physiologic way can be very helpful. Indeed, much of the current use ofT3 is in the hands of psychiatrists, who. use it as an adjunctive treatment for depression that is not responding well to standard antidepressants. Although this can be extremely effective, psychiatrists tend to use pharmacologic doses rather then physiologic doses. In other words, they exceed the amount needed to reproduce normal hormone balance. For virtually every purpose, a physiologic dose is desirable since excessive doses yield no additional benefits. I also disagree with the use of Armour thyroid by itself for the same reason, that it does not contain a physiologic balance of T4 to T3. The human thyroid produces roughly 95% T4 and 5% T3. Armour thyroid is an animal thyroid that contains 80% T4/20% T3. People who take Armour thyroid usually feel better for a short period of time because they were deficient in T3 but, after a period of time, the Armour thyroid will cause a T4-T3

imbalance at tissue level and a variety of undesired symptoms can then develop over time. One can get a better balance by giving some T4 with the Armour.

Some doctors are reluctant to prescribe (and some women reluctant to take) thyroid hormones in the belief that this will somehow increase the risk of osteoporosis. . I personally do not believe that there is good evidence for this, although my guess would be that excessive thyroid hormone does contribute to bone loss. Since there is no benefit in going above the normal physiologic levels of thyroid hormone, following the TSH result and clinically monitoring the patient will prevent overdose and resultant adverse effects.

Every organ system in the body is affected to some degree by treatment with thyroid hormone. I believe that the proper treatment of hypothyroidism with physiologic amount ofT4 and TI is critical in managing many complex medical problems at mid-life. If treatment is carefully monitored, there are no adverse effects. Management of hypothyroidism with T4 and TI is significantly more complicated than the standard 100% T4 therapy that has been used for the past 30 years or so. TI dosage must be monitored and altered precisely for optimum effect and this must be done by the use of compounded T3 time-release capsules. These are almost always made in units of 1OO capsules for practical reasons. Patients are initially seen every three months in order to adjust the dosage for the next prescription of T3. Another practice that will eventually become standard in this field is the adjustment of thyroid dosage for seasonal change, i.e., higher dosage in the colder weather and reduced dosage in the warmer weather.

Once dosage has been adjusted over 3 to 5 3-month visits and everything appears stable, visits are done at 6-7 month intervals. Patients must be ready to keep their appointments and take the medication exactly as directed. At the present time, there are many patients on a waiting list so that patients who drop out of the treatment plan fall back to the end of the list. Patients who have difficulty with the practices outlined above should stay with their current therapy.

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Read the transcript of Dr. Kenneth Blanchard