Hypothyroidism and Special Conditions

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Pregnancy

Higher than usual T4 levels, with lower than usual TSH levels, are typical of early normal pregnancy and appear to be important for normal brain development in the fetus. Since T4 and T3 combination hormone combinations lower T4 levels, these should not be used during pregnancy. Women using these preparations should be switched to T4 when planning to conceive and, at the very latest, when found to be pregnant. When a woman with hypothyroidism becomes pregnant, the dosage of T4 should be adjusted to a very specific target TSH, and T4 should also be checked to make sure it, too, is in the normal range for pregnancy.

Diabetes Mellitus

Approximately 10 percent of people with type 1 diabetes mellitus (the type where insulin treatment is required because the pancreas does not make any insulin) will develop chronic

inflammation of the thyroid -- called “thyroiditis” -- which can lead to hypothyroidism. TSH measurements should be checked in these individuals at regular intervals.

Infertility

Some patients with infertility and menstrual irregularities have underlying chronic thyroiditis in addition to a borderline or clear-cut hypothyroidism. TPOAb positive patients, even when the thyroid levels are normal, can have an excess miscarriage rate. In some patients who are hypothyroid, thyroid hormone replacement therapy can normalize menstrual cycles and restore fertility. Because of the importance of thyroid levels being normal before attempting pregnancy, thyroid levels should be checked in women who are thinking about starting a family if they are at increased risk for thyroid disease or are TPOAb positive, particularly if they have had miscarriages.

Obesity

Hypothyroidism and obesity are often linked. Early medical observations of significant weight loss following the treatment of severe hypothyroidism were based on seeing people lose excessive fluid that typically accumulates when severely hypothyroid. However, appetite is stimulated by taking too much thyroid hormone, which makes it a poor weight-loss drug, and higher than normal thyroid levels in the body may have serious negative effects on the cardiovascular system, skeleton and mood.

Depression

The possibility of hypothyroidism must be considered in every person with depression since depression can be due to hypothyroidism. All people receiving lithium therapy require periodic thyroid evaluation because taking lithium may produce a goiter and hypothyroidism. Occasionally, some people who have depression are treated not only with antidepressants but also with thyroid hormone, even though they have normal thyroid function. No firm evidence has shown that thyroid hormone treatment alone can alleviate depression. Supplements in the Treatment of Hypothyroidism Over-the-counter products marketed for “thyroid support” or as a “thyroid supplement” or to promote “thyroid health” are not recommended, as they have not been shown to help the thyroid function. Some products may contain thyroid hormone, while others might contain excess iodine, which could be associated with health risks (see paragraph below).

Excess Iodine Intake and Hypothyroidism

In those with normal thyroid hormone levels, especially if they have chronic thyroiditis, intake of seaweed or kelp or other sources of excessive iodine intake may cause hypothyroidism. Iodine in any form should not be used to treat hypothyroidism in iodine-sufficient regions such as the

USA. However, pregnant women can take a prenatal vitamin with iodine in it. *(Editor's Note: Not all prenatal vitamins have iodine).*

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Desiccated Thyroid

Animal-derived desiccated thyroid contains T4 and T3. Viewed by some as a "natural" source of thyroid hormone, this has made it attractive to some people who may not even have biochemically confirmed hypothyroidism and wish to lose weight or increase their sense of well-being. There is substantially more data on the use of synthetic T4 in the management of well-documented hypothyroidism, goiter and thyroid cancer than for desiccated thyroid hormone. There are no controlled trials supporting the preferred use of desiccated thyroid hormone over synthetic T4 in the treatment of hypothyroidism or any other thyroid disease.

Thyroid -Enhancing Preparations

Selenium should not be used to prevent or treat hypothyroidism.

Areas for Future Research

Despite all of the information we have about hypothyroidism, many issues still have to be resolved. To further improve upon treatment of the vast majority of those with hypothyroidism will require ongoing research to figure out the following:

- Whether treating mild hypothyroidism will prevent heart disease and improve brain function
- Why some people feel better on T4/T3 combinations than T4 alone, how to identify them and how to treat them safely with this combination
- Whether prenatal screening for hypothyroidism will prevent pregnancy complications and help early childhood development Despite all of the information we have about hypothyroidism, many issues still have to be resolved.