



Stewardship of the Body

“I give you thanks that I am fearfully, wonderfully made” (Ps. 139)

Thyroid Disorders

Hypothyroidism (Underactive thyroid)

Hypothyroidism is a condition in which the thyroid gland does not produce enough thyroid hormone to meet the body's needs. This upsets the normal balance of chemical reactions in the body since the thyroid hormones affect a number of processes that go on in the body.

SYMPTOMS: Generally the symptoms develop slowly and may not be noticeable for quite some time. Also, often they are mild at first, with fatigue and weight gain due to the effect on metabolism. Symptoms of hypothyroidism may include some or all of the following:

<ul style="list-style-type: none">• Fatigue• Constipation• Dry skin• Hoarseness• Muscle weakness• Muscle aches, tenderness, weakness• Thinning hair• Slowed heart rate	<ul style="list-style-type: none">• Increased sensitivity to cold• Unexplained weight gain• Puffy face• Elevated cholesterol• Pain, stiffness, swelling in joints• Heavier than normal or irregular menstrual periods• Depression• Impaired memory
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If left untreated, the signs and symptoms will become more severe. The constant stimulation of the thyroid by the pituitary hormone, TSH, can cause the thyroid to become enlarged. This is called a “goiter”. A very advanced form of hypothyroidism is called myxedema. It occurs very rarely nowadays, but can be life-threatening if left untreated.

Hypothyroidism occurs most frequently in women over 60; however it can occur in younger people including children and teenagers. Generally their symptoms are similar. It can also occur in babies who may be born with an absent, abnormal or defective thyroid gland.

TESTING: Women over 60 should be tested at their annual checkup and anyone having any of the usual symptoms should have their thyroid function tested. The best blood test to assess thyroid function is a measurement of the TSH level in the blood. That is because the pituitary hormone, TSH, stimulates the thyroid to produce the hormone, thyroxine. If the thyroxine level is low, the TSH will be elevated because it is trying to stimulate the thyroid to make more hormone.. That would indicate possible hypothyroidism. The amount of thyroid hormone in the blood also can be tested.

TREATMENT: The standard treatment for hypothyroidism is a daily dose of a synthetic thyroid hormone, levothyroxine (Synthroid, Levothroid, and others). When first started on the thyroid medication, the TSH level will be monitored periodically to determine the appropriate dose.

Hyperthyroidism (Overactive Thyroid)

Hyperthyroidism is a condition in which the thyroid gland produces too much of the thyroid hormone, thyroxine. This affects a number of processes in the body. This condition is less common than hypothyroidism.

SYMPTOMS: Hyperthyroidism can mimic a number of other health conditions, so may not be easy to diagnose at first. Also, it can cause a wide variety of symptoms which may include some of the following:

<ul style="list-style-type: none">• Sudden weight loss even though the amount and type of food eaten is the same or has increased• Rapid heartbeat (tachycardia), irregular heartbeat (arrhythmia) or pounding heart (palpitations)• Increased appetite• Nervousness, irritability, anxiety• Tremor – usually a fine trembling of hands and fingers	<ul style="list-style-type: none">• Sweating• Changes in menstrual patterns• Increased sensitivity to heat• Changes in bowel patterns, more frequent• Enlarged thyroid gland (goiter)• Fatigue, muscle weakness• Difficulty sleeping• Thinning of skin• Fine, brittle hair
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Older adults may have few, no or very subtle symptoms, such as increased heart rate, heat intolerance or tiredness during ordinary activities. Beta blocker medications used to treat high blood pressure and other conditions can mask the symptoms of hyperthyroidism.

If the hyperthyroidism is caused by Grave's Disease there can be some symptoms involving the eyes such as protruding eyeballs, swollen or red eyes, excessive tearing or discomfort, light sensitivity, blurry or double vision, inflammation or reduced eye movement.

TESTING: Testing for hyperthyroidism would include a history and physical exam by the health care practitioner. Blood tests for the TSH and thyroxine levels would be done. If there is a high level of thyroxine and a low level of TSH, it would indicate hyperthyroidism. The physician may order additional tests to try to determine the cause of the hyperthyroidism. These may include a radioactive iodine uptake test and/or a thyroid scan.

TREATMENT: There are several treatment options available for hyperthyroidism. The best one for each person can be determined according to their age, general physical condition, and the severity of the disorder.

- Anti-thyroid medications include methimazole (tapazole) or prophythiouracil. They prevent the thyroid gland from producing excessive amounts of hormone which gradually reduces the symptoms that may be present. They may need to be taken for several months or a year or more. Both can cause some liver damage, but the methimazole is less likely to do so, so it is used more frequently. They also can make a person more susceptible to infection.
- Radioactive iodine taken by mouth is absorbed by the thyroid causing the gland to shrink and symptoms to subside within 3 to 6 months. This may result in the person developing hypothyroidism which then may have to be treated with the synthetic thyroid. This treatment has been used for over 60 years and is considered to be generally quite safe.
- Beta blockers can be used to ease some of the symptoms, such as heart palpitations. They don't have a direct effect on the thyroid

- Sugery (thyroidectomy) generally is not done unless the other treatments are not effective, are not tolerated by, or are inappropriate for a particular person.

Source: www.mayoclinic.org/diseases-conditions