

Hypothyroidism (Underactive Thyroid)

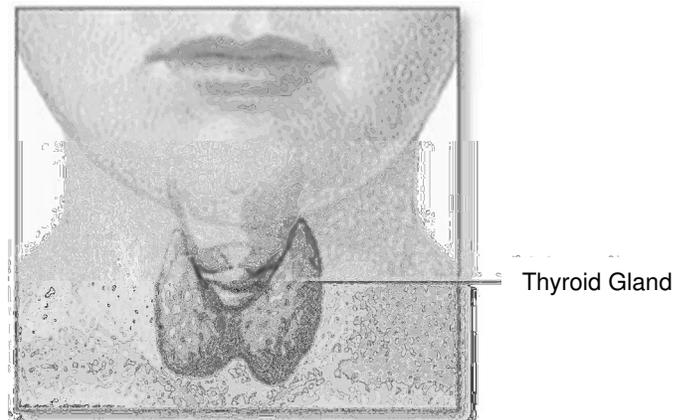
Hypothyroidism (hi po THY roid izm) happens when the body does not make enough thyroid hormone. As a result, many body functions slow down. Underactive thyroid is the most common thyroid problem. Sometimes hypothyroidism is caused by our own immune system. This happens when our body makes proteins called antibodies that attack and damage the thyroid gland. Less often, a cyst, disease, surgery, radiation or injury to the thyroid gland can cause hypothyroidism.

The Thyroid Gland

The thyroid is a gland in the middle of the neck just below the Adam's apple. It is shaped like a butterfly (Picture 1). The thyroid gland makes two important hormones called thyroxine (T4) and triiodothyronine (tri i o do THY ro nen, T3). Another important hormone called thyroid-stimulating hormone (TSH) is made in the brain. It tells the thyroid gland to make T3 and T4.

Together these hormones help control:

- growth and development of the body and brain
- the work of the heart, liver, kidneys, skin
- energy use (metabolism) by the body



Picture 1 Thyroid Gland

Types of Hypothyroidism

There are two types of hypothyroidism found at birth.

- **Transient hypothyroidism:** abnormal thyroid hormone levels at birth caused by exposure to thyroid medication from the mother or by mother's antibodies. It usually goes away and does not need long-term treatment.
- **Congenital hypothyroidism:** present at birth and found through newborn screening. If it is not treated, this type can lead to mental retardation.

Symptoms

Symptoms of hypothyroidism in children are different from adults. Each child may experience different symptoms—or no symptoms at all. These are the most common symptoms by age:

- Newborns – jaundice (yellow color of the skin), constipation and poor appetite
- Children – slow growth
- Teenagers – delayed puberty

Diagnosis

Your child will have blood tests to measure thyroid hormone levels. Depending on the results, your child's doctor may order special X-rays. An ultrasound of the thyroid gland uses sound to see pictures of the gland. X-rays using dye may be done to measure the function of the gland. A bone age X-ray may be done to see how your child's bones are growing.

Treatment

The treatment of underactive thyroid is simple and effective. Your child will be given medicine in tablet form to take every day. It is important your child take it every day at the same time. It comes in many different doses. (See the Helping Hand Thyroid Hormone Medicine, HH V-240 for signs of too much or not enough medicine).

When to See the Doctor

Since hypothyroidism is lifelong, your child will see a doctor regularly. He will be seen by an endocrinologist (n do crin O lo gist), a doctor who specializes in the treatment of hormone issues. Your child is seen every 3 to 4 months the first year, depending on how he is doing. He will have exams, growth checks and blood tests to make sure the amount of thyroid medicine is correct. With proper treatment and the correct dose of medicine, your child's chances for normal growth and development are good.