Hypothyroidism in Children

Your child has been diagnosed with hypothyroidism. This occurs when the thyroid gland, one of the body’s endocrine glands, does not make enough thyroid hormone. Thyroid hormone affects your child’s weight gain, controls body temperature, helps control the heartbeat, and is one of the controls of the body’s growth and the brain’s development. This handout will answer some questions you may have about the condition and how it is treated.

Glossary of Terms

- **Gland** – A special group of cells in the body that sends out a hormone.
- **Hormone** – A chemical messenger sent out from a gland into the bloodstream where it can carry its message to other cells in the body.
- **Euthyroid** – “Eu” means “normal.” Euthyroid means the thyroid gland is working normally.
- **Hypothyroid** – “Hypo” means “too little, not enough.” Hypothyroid means the thyroid gland is not making enough thyroid hormone.
- **Hyperthyroid** – “Hyper” means “too much.” Hyperthyroid means the thyroid gland is making more thyroid hormone than the body needs.

The Thyroid Gland

The thyroid gland is a butterfly-shaped gland in the center front of the neck. A healthy thyroid gland sends out hormones, called triiodothyronine (T3) and thyroxine (T4). When the thyroid gland gets a message from the brain that the body needs these two hormones, the thyroid gland sends them into the bloodstream. The blood then carries thyroid hormone everywhere in the body.

If the thyroid gland slows down or stops making enough thyroid hormone, the symptoms may include

- Swelling in the front of the neck.
- Intolerance to cold, feel cold all the time.
- Feel tired or sleepy during the day.
- Constipation.
- Poor growth.
- Rough or brittle hair.
- Mild weight gain due to puffiness in face, hands, and feet

Hypothyroidism does not cause obesity.

Treatment

Hypothyroidism is treated with a thyroid hormone pill. The thyroid hormone pill doctors often give is called Synthroid or levothyroxine sodium. It is important to take this pill at the same time **every day** as part of your daily routine so you don’t forget to take it. Each person or family should find the right routine that works for them. Be careful not to give this pill at the same time with calcium or iron.
The child that is still growing will need different doses of thyroid hormone as the child gets bigger. The doctor may do a blood test before or after clinic visits to make sure the dose is correct. The doctor may make changes in the dose of the pill based on your child’s lab results.

The symptoms of hypothyroidism will go away with treatment. It is still very important to keep taking the thyroid pills. Without the pills, the symptoms will return.

Signs of too little thyroid hormone
- Sleepiness
- Constipation
- Feeling cold all the time
- Decreased appetite in babies
- Weight gain
- Rough, coarse hair

Signs of too much thyroid hormone
- Jittery, unable to sit still
- Crabby
- Weight loss
- Feel warm all the time
- Diarrhea
- Insomnia, trouble sleeping

Clinic Visits
The doctor or nurse will check thyroid function in several ways during clinic visits.
- Palpation – the doctor will feel the thyroid for any changes in size or if one side is bigger than the other.
- Reflexes – The doctor will tap the knee, ankle, and elbow with a rubber hammer to see if it twitches. If the thyroid hormone is low (hypo), the reflexes may be slow. If the thyroid hormone is high (hyper), the reflexes may be fast.
- Heart rate – The heart rate may be slower with hypothyroidism. With hyperthyroidism, the heart rate may be faster.
- Blood pressure – Blood pressure may be low with hypothyroidism. Blood pressure may be high with hyperthyroidism.
- Skin and hair – Skin and hair may be dry and rough with hypothyroidism. In hyperthyroidism, skin and hair may be moist and oily.
- Height and weight – With hypothyroidism your child may not grow at the proper rate. With hyperthyroidism, your child may grow at the proper rate and may also lose weight. Your child will be weighed and measured during clinic visits to see if your child’s body is growing as it should.

Pediatric Endocrinology
(608) 263-6420

After hours, this number is answered by the paging operator. Ask for the endocrinologist on call. Leave your name and phone number with the area code. The doctor will call you back.

If you live out of the area, call 1-800-323-8942.