



# Thyroid Disease in Women

## Patient Education Sheet

This sheet focuses on signs and symptoms of, and treatment options for, thyroid disease in women.

### An Overview of Thyroid Disease in Women

- Women are 5 times more likely than men to have a thyroid disorder.
- The likelihood of a woman developing a thyroid disorder is increased by several factors, including age, family health history, pregnancy, lithium prescriptions, or autoimmune conditions, such as Addison disease, type 1 diabetes, pernicious anemia, rheumatoid arthritis, or lupus.
- New mothers have approximately a 5% chance of developing a thyroid disorder within the first 6 months after delivery.

### The Thyroid Gland—The Basics

- The thyroid is a butterfly-shaped gland located at the base of the neck that lies on either side of the windpipe. It produces and releases thyroid hormone.
- Thyroid hormone affects every cell in the body and controls most of the body's functions.
- The amount of thyroid hormone made by the thyroid gland is regulated by the pituitary gland and the hypothalamus in the brain.
- The pituitary gland releases thyroid-stimulating hormone (TSH), which signals the thyroid to produce more thyroid hormone. When the pituitary gland senses that there is the right amount of thyroid hormone in the body, it will decrease thyroid hormone production.
- Physicians can measure the health of the thyroid gland by measuring levels of TSH.
- Too little thyroid hormone production causes a condition known as hypothyroidism; too much thyroid hormone production causes a condition known as hyperthyroidism.

### Hypothyroidism and Mild Thyroid Failure

- When a patient has hypothyroidism, she may feel tired and cold, have a slow heartbeat, or feel depressed.
- Mild thyroid failure is a mild form of hypothyroidism. In patients who have mild thyroid failure, the thyroid hormone levels are normal, but the TSH level is elevated.
- Patients with mild thyroid failure often do not show any obvious signs or symptoms, but untreated mild thyroid failure may lead to hyperthyroidism.

### Key Points for Female Patients With Hypothyroidism

- Female patients with hypothyroidism may find that their menstrual flow is heavier and lasts longer. Periods may also occur more frequently than the normal 28-day cycle.
- In a female patient with hypothyroidism, her ovaries may fail to release eggs. If a patient becomes pregnant, her body may be unable to support the pregnancy if the hypothyroidism is untreated.
- Untreated hypothyroidism increases the risk of complications or miscarriage during pregnancy. Although the thyroid hormone replacement therapy treatment is the same for pregnant patients, the dose may need to be increased during pregnancy and decreased after delivery.

### Hyperthyroidism and Mild Hyperthyroidism

- Patients with hyperthyroidism may feel jittery and may experience nervousness, a rapid heartbeat, or unexplained weight loss.
- Patients with mild hyperthyroidism have normal thyroid hormone levels and a decreased TSH level. Untreated mild hyperthyroidism can progress to hyperthyroidism, and may lead to potentially harmful consequences, such as cardiovascular disorders.

### Key Points for Females With Hyperthyroidism

- Female patients with hyperthyroidism may experience a lighter menstrual flow. In addition, the flow cycle may extend beyond 28 days or menstruation may completely stop.
- Infrequent menstruation makes it more difficult to get pregnant. If a patient does get pregnant, her body may not be able to support the pregnancy unless the thyroid disorder is treated.
- Untreated hyperthyroidism during pregnancy can expose the unborn child to a variety of dangers that can lead to premature delivery or miscarriage. Antithyroid drugs or surgery are the recommended treatment options for pregnant patients.
- Postpartum thyroiditis is a condition that occurs after giving birth and may include both hyperthyroidism or hypothyroidism. Postpartum thyroiditis can be a temporary condition, or it can develop into a long-term thyroid disorder.
- Untreated hyperthyroidism results in an increased rate of bone turnover (new bone development). However, this means that old bone is dissolved before new bone is formed, and the body cannot keep up with the rate at which the old bone is dissolving, leading to osteoporosis.

### Diagnosing Hypothyroidism and Hyperthyroidism

- If a physician suspects a woman has hypothyroidism or hyperthyroidism, he or she will probably inquire about whether thyroid disease runs in the patient's family, whether other risk factors are present, or whether the patient is experiencing any signs or symptoms of the disorder.
- A physician will also conduct laboratory tests to diagnose a thyroid disorder. The best test for determining thyroid function is the TSH test, which measures the concentration of TSH in the blood. By measuring TSH, the physician can detect the earliest signs of a thyroid disorder. If the patient's TSH level is higher than normal, she may have hypothyroidism. If the patient's TSH level is lower than normal, she may have hyperthyroidism. Thyroid antibody tests will help a physician determine whether a patient's immune system is affecting thyroid function.

### Treatment Options for Hypothyroidism

- To treat hypothyroidism, a physician will most likely prescribe thyroid hormone replacement therapy with a synthetic thyroid hormone called levothyroxine sodium. Treatment will continue for the rest of the patient's life, with a physician monitoring thyroid hormone levels once a year after the correct dose is achieved.

### Treatment Options for Hyperthyroidism

- The first treatment option for hyperthyroidism is radioactive iodine therapy. The iodine goes directly to the thyroid gland and destroys thyroid cells, thereby decreasing the production of thyroid hormone.
- Another treatment option for hyperthyroidism includes the use of antithyroid drugs. Antithyroid drugs slow down the thyroid gland's production of thyroid hormone. Often, however, the hyperthyroidism will return after the medication is stopped and further treatment will be needed.
- Surgical removal of the thyroid gland is another option. This is the least frequently used option, but it may be recommended if the patient is pregnant and does not respond to, or is allergic to, antithyroid drugs, does not wish to have radioactive iodine therapy, or has a thyroid nodule.
- Often after being treated for hyperthyroidism, a patient will become hypothyroid and require lifelong thyroid hormone replacement therapy.

### More Information

- Patients who have further questions should contact their physician.