

### **Definition**

Thyroiditis is inflammation of the thyroid gland, a butterfly-shaped organ next to the windpipe.

### **Description**

The thyroid is the largest gland in the neck. It produces, secretes, and stores thyroxine (T4), a hormone that influences the metabolism of just about every body process.

When the thyroid gland is functioning properly, hormone release is carefully regulated. When bacteria or viruses invade and inflame the gland, T4 surges into the bloodstream and raises hormone levels that then discourage the gland from creating more T4. Eventually the hormone stores are exhausted, the thyroid loses its ability to manufacture T4, and an underactive thyroid (hypothyroidism) results.

The major cause of hypothyroidism, thyroiditis affects about 12 million people in the United States. This condition is more common in women than in men and usually develops between ages 30–50.

### **Hashimoto's disease**

The most common type of thyroiditis is Hashimoto's disease, a painless disorder also known as:  
autoimmune thyroiditis  
chronic lymphocytic thyroiditis  
lymphadenoid goiter  
struma lymphomatosa

Hashimoto's disease can develop at any age, but is most common in middle-aged women. This immune system disorder runs in families, and affects about 5% of adults in the United States.

Hashimoto's disease slowly destroys thyroid tissue and robs the gland of its ability to change iodine into T4. The condition progresses so gradually that many people who have it do not realize anything is wrong until the enlarged gland forms a goiter, a swelling seen and felt in the front of the neck. This may not happen until weeks or even years after an individual develops Hashimoto's.

### **Subacute thyroiditis**

Much less common than Hashimoto's disease, subacute thyroiditis is a painful inflammation that develops suddenly in a patient who has had a viral infection, such as mumps or an upper respiratory illness. Pain radiates throughout the neck and patients feel ill and feverish. It may take as long as several months for normal thyroid function to resume.

Subacute thyroiditis is also called:  
DeQuervain's thyroiditis  
giant cell thyroiditis  
granulomatous thyroiditis  
subacute granulomatous thyroiditis

### **Silent thyroiditis**

The least common of the three major types, silent thyroiditis is characterized by rigidity and slight enlargement of the thyroid gland. Postpartum thyroiditis, a form of silent thyroiditis, develops in 5–9% of all women who have recently given birth. Postpartum thyroiditis develops within a year of the baby's birth and disappears within six months.

### **Acute thyroiditis**

Caused by acute infection, this rare disease is a medical emergency. A patient who has acute thyroiditis has a high fever and feels very ill. The neck is red, hot, and very tender.

### **Causes and symptoms**

#### **Hashimoto's disease**

Hashimoto's disease develops when the immune system attacks the thyroid gland. It may be related to such hormone-related (endocrine system) disorders as:

Addison's disease. This condition, caused by malfunction of the adrenal gland, is characterized by weakness, loss of weight and appetite, and increased sensitivity to cold.

Diabetes mellitus. This metabolic disorder is caused by a lack of insulin production or by the body's inability to process insulin.

Graves' disease. This disease is the most common form of hyperthyroidism.

Vitiligo. This is a noncancerous skin disease characterized by unpigmented patches of skin.

Being female and having a family history of Hashimoto's thyroiditis increases the likelihood of developing the disease. Its symptoms include:

constipation

fatigue

goiter or enlarged neck

inability to tolerate cold temperatures

weight gain, some patients' faces swell and their joints stiffen.

#### **Subacute thyroiditis**

Characterized by painful gland enlargement that is sometimes mistaken for a sore throat that may last for months, subacute thyroiditis often follows:

influenza

mumps

upper respiratory infections

viruses that produce cold symptoms and inflammation of the membrane that protects the brain (meningitis),

inflammation of the sac that surrounds the heart (pericarditis), inflammation of the heart muscle (myocarditis), and other diseases

People who have subacute thyroiditis feel feverish, weak, and tired. The thyroid is sore to the touch. They may be nervous, sweat, and have trouble tolerating heat or swallowing. Symptoms of subacute thyroiditis also include:

rapid heartbeat

tremors

weight loss

#### **Silent thyroiditis**

The cause of silent thyroiditis is uncertain, but the condition is believed to be an immune-system disorder triggered by childbirth. Although silent thyroiditis is painless, the condition's other symptoms are similar to those of subacute thyroiditis. The thyroid gland enlarges only slightly, and the eyes do not bulge

#### **Prevention**

Flu shots or immunizations for measles, mumps, and rubella may help prevent conditions associated with subacute thyroiditis. There is no known way to prevent other forms of thyroiditis.

