

## Thyroiditis

Thyroiditis is a general term referring to inflammation of the thyroid gland. The thyroid is located in the lower front of your neck; it is not normally visible or palpable. The thyroid gland produces thyroid hormone to help your body to regulate metabolism & to utilize energy to keep your brain, heart, muscle and other organs work properly. There are three common forms of thyroiditis.

### Chronic lymphocytic (auto-immune) thyroiditis

The condition is also known as Hashimoto thyroiditis. It affects 1 in 20 women & is a painless condition that develops over many years and eventually leads to permanent hypothyroidism. The treatment is to take life-long thyroid hormone replacement (l-thyroxine). For more information see [this article](#) on the BCDiabetes website.

### Painful thyroiditis

This condition is also known as sub-acute thyroiditis. It is caused by the same viruses that cause colds and upper respiratory infections. The thyroid gland becomes enlarged (“goitre”) and tender to the touch. It gets better on its own, without antibiotics, over the course of a few weeks, occasionally months. The pain in the thyroid gland can be severe in which case medications such as non-steroidal anti-inflammatory drugs such as ibuprofen or prednisone should be used with great effect.

### Painless thyroiditis

This condition is also known as post-partum thyroiditis because it is common after childbirth. It is caused by the immune system attacking itself (auto-immunity). In 90% of cases it gets better on its own. In 10% of cases it leads to permanent [hypothyroidism](#) and requires life-long thyroid hormone replacement.

Both painful and painless thyroiditis are associated with an initial period of [hyperthyroidism](#) (overactive thyroid) lasting 2-3 weeks followed in many cases by mild hypothyroidism lasting a few months. Common hyperthyroid symptoms include weight loss, tremor, palpitation, sweating, heat-intolerance, diarrhea, fatigue and anxiety. During the hyperthyroid phase, other than giving medication to reduce tremor or shaking such as beta blockers (eg propranolol) no medication is effective: the hyperthyroid phase will gradually resolve on its own.

In about one third of cases of thyroiditis a period of hypothyroidism follows. It is usually mild with no symptoms but may become prolonged or symptomatic (fatigue, weight gain, puffiness) in which case thyroid hormone replacement therapy may be used for 6-12 months. Occasionally (<5% of cases) hypothyroidism may be permanent.

The treatment of thyroiditis is based upon symptoms (if painful, painkillers are used) and the results of blood tests. The usual blood tests are TSH, and free T4.

**Treatment** is different in each phase:

1- Hyperthyroid phase – No active treatment is needed in this phase since it gets better on its own (it is self-limited). Beta blockers such as propranolol or atenolol may be helpful to decrease palpitations and tremor. As symptoms improve, the medication is tapered off. Antithyroid medications (see [Graves disease hand out](#)) are not used for the hyperthyroid phase of thyroiditis.

2- Hypothyroidism – Treatment is initiated with thyroid hormone (levothyroxine) replacement if the TSH rises above 10 or the TSH is 5.0-10.0 and the patient feels tired. For dosing and other information see see [this article](#) on the BCDiabetes website. Once begun, levothyroxine is typically continued for 12 months. After 12 months the levothyroxine may be stopped, and after a month of no therapy the TSH should be remeasured. If the TSH is above the normal range the levothyroxine should be resumed and taken indefinitely (forever).

3-Thyroid pain – The pain associated with painful thyroiditis usually can be managed with mild anti-inflammatory medications such as aspirin or ibuprofen. Occasionally, the pain can be severe and require therapy with powerful drugs from the glucocorticoid class such as prednisone.