

# Graves' Disease

## What is Graves' Disease?

Graves' Disease is the most common type of hyperthyroidism. Hyperthyroidism is a condition in which the body produces too much thyroid hormone.

People with Graves' Disease rarely die or become extremely sick because of it.

## What causes Graves' Disease?

The precise cause of Grave's Disease is still unknown. The disease appears to be an autoimmune disease. This means that the body's defences against infection attack the body's own tissue. In the case of Graves' disease, the body appears to be making antibodies that cause the thyroid gland to make more hormone than normal. As a result, the body has too much thyroid hormone.

The thyroid gland is key to maintaining normal metabolism. Metabolism regulates your heart rate, the amount of calories you burn when you are resting, your energy level, and other bodily functions. When thyroid function becomes abnormal, the effects on your body can be dramatic.

## What are the symptoms?

The most common symptoms of Graves' Disease are:

- weight loss
- rapid heart rate
- anxiety, tiredness, or sleeplessness
- feeling shaky, having tremors
- feeling sweaty and hot, even though others around you are comfortable
- diarrhoea
- shortness of breath
- difficulty focusing your eyes
- a bulging of one or both of your eyes

Many people feel nervous or are not able to control their emotions. Some feel muscle weakness, especially in the thigh muscles when going upstairs. A few people notice a swelling in their neck because of an enlarged thyroid.

A proportion of people with Graves' disease develop eye symptoms. These symptoms include eyes that protrude more than usual from the sockets and eyelids that do not completely close over the eye. Dryness and irritation of the eyes are common. Sometimes

the eye muscles are affected, which may limit movement of the eyeballs. Sometimes just one eye has symptoms, but usually both eyes are affected.

### How is it diagnosed?

The diagnosis is made by a simple blood test, measuring thyroid hormones. We will also check for antibodies in the blood that attack the thyroid gland.

Additional tests may be done. A test called a radioactive iodine scan, or RAI uptake, shows if there are areas of the thyroid gland making more or less hormone than normal.

Another type of thyroid scan uses ultrasound which can show cysts or tumours in the gland and can be used to measure the size of the gland.

### How is it treated?

The options for treatment are medication, radiation, and surgery. These treatments lower the amount of thyroid hormone in your body.

The two anti-thyroid drugs commonly used to decrease the production of thyroid hormone are Carbimazole and Propylthiouracil (PTU). At first you may be started on a high dose of medicine. Your doctor will check the effect on your thyroid hormone levels every 4 to 6 weeks. After several weeks the dose of medication will be reduced. You will need to remain on antithyroid drugs for at least 18-24 months.

The anti-thyroid drugs can occasionally cause a decrease in your white blood cells. It is therefore important that if you develop a sore throat with ulceration or a fever while you are taking antithyroid drugs you seek medical help immediately so that your white blood cell count can be checked

The medicines used only to control symptoms are a type called beta blockers. It slows heart rate, lowers blood pressure, and may help calm feelings of anxiety. Beta blockers do not affect the production of thyroid hormone.

A pill containing radioactive iodine is commonly used to treat some types of hyperthyroidism, especially if you have had hyperthyroidism more than once. The main risk of this treatment is that your thyroid levels will become too low, but it is easily treated with drugs.

Surgery can be done to remove part or all of the thyroid gland or a growth in the gland. Surgery cures the disease 90% of the time. However, surgery has certain risks, including nerve damage and low thyroid levels.

More information is available on the Trust website [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

This document can be made available in other languages and formats upon request.

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