

Graves' Disease (Thyroid Gland Problem)

What is Graves' disease?

Graves' disease is the most common type of hyperthyroidism. Hyperthyroidism means the body has too much thyroid hormone.

Graves' disease is more common in women than men. It usually happens in young and middle-aged women. Grave's disease usually does not cause severe illness.

What is the cause?

The exact cause of Grave's disease is not known. It appears to be an autoimmune disease. This means that the body's defenses against infection attack the body's own tissue. In the case of Graves' disease, the body makes antibodies that cause the thyroid gland to make too much hormone.

Hormones made by the thyroid gland control your metabolism (the chemical processes your body uses to turn the food you eat into energy). Metabolism affects your heart rate, the amount of calories you burn when you are resting, your energy level, and other body functions. When your thyroid is not working properly, 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
- Feeling hot
- Sweating a lot

Many people feel nervous or not able to control their emotions. Some feel muscle weakness, especially in the thigh muscles when they climb stairs. A few people have a swelling in their neck because of an enlarged thyroid gland. The enlarged gland is called a goiter.

About half of all people with Graves' disease have an eye problem called exophthalmos or Graves' ophthalmopathy. The eyelids do not completely close over the eye. The eyes may protrude from their sockets. Even if the eyes are not protruding, they may look like they are bulging because the eyelid closes over less of the eye. The eyes may feel dry and irritated. The eye muscles can be affected, which may limit movement of the eyeballs. Sometimes just one eye has symptoms, but usually both eyes are affected.

How is it diagnosed?

Your healthcare provider will do a thorough medical history and physical exam, including an exam of your eyes. He or she will look for enlargement of your thyroid gland, a pulse rate faster than normal, and higher blood pressure. Your provider will test the strength of the muscles of your upper legs and look for trembling of your hands.

You will have blood tests to:

- Measure the level of thyroid hormones.
- Check for antibodies in the blood that attack the thyroid gland.

Other tests that may be done are.

- A radioactive iodine scan, or RAI uptake. This test shows if there are areas of the thyroid gland making more or less hormone than normal. For this test you will be given a very tiny amount of a radioactive form of iodine. Because the body uses iodine to make thyroid hormone, the radioactive iodine attaches to thyroid hormone being made in the thyroid gland. A scan to look for radioactivity in the thyroid gland then shows areas of the gland making thyroid hormone. (The iodine becomes nonradioactive in 3 days.) Sometimes a radioactive chemical similar to iodine may be used instead of iodine.
- A scan of the thyroid gland with ultrasound. This is another way to look at the thyroid gland. The ultrasound scan can show cysts or tumors in the gland. It can also be used to measure the size of the gland.

How is it treated?

Doctors don't know how to stop the body from making the antibodies that seem to cause hyperthyroidism. However, treatment can help you have more normal levels of thyroid hormone and control your symptoms.

The most common anti-thyroid drug used to stop the thyroid gland from making too much hormone is methimazole (Tapazole). At first you may need to take the medicine up to 3 times a day. Your healthcare provider will check the effect of the medicine on your thyroid hormone levels every 2 to 4 weeks. Depending on which medicine you are taking, after several weeks you may need to take it just 1 or 2 times a day.

Women in early pregnancy should not take methimazole. Propylthiouracil (PTU) is a safer choice for the first few months of pregnancy.

Antithyroid drugs can cause a decrease in your white blood cells. Your healthcare provider will check your white blood cell count before you begin taking the drugs and then recheck it during your drug therapy.

Another type of medicine called a beta blocker may be used to help control symptoms. Propranolol (Inderal) and metoprolol (Lopressor or Toprol) are the beta blockers usually used. It slows heart rate, lowers blood pressure, and may help calm feelings of anxiety. Beta blockers do not change how much thyroid hormone is made.

Sometimes steroid medicine (prednisone) is used to treat eye problems caused by hyperthyroidism. Using a steroid for a long time can have serious side effects. Take steroid medicine exactly as your healthcare provider prescribes. Don't take more or less of it than prescribed by your provider and don't take it longer than prescribed. Don't stop taking a steroid without your provider's approval. You may have to lower your dosage slowly before stopping it.

For reasons that are not understood, nonsmokers get better results from treatments for eye problems than smokers. The eyes need to be kept moist, so your healthcare provider may recommend that you use eyedrops.

If your symptoms of too much thyroid hormone are severe or continue for a long time, your healthcare provider may suggest destroying at least some of the hormone-producing cells in the thyroid gland. This can be done 2 ways. The method with the least complications uses radioactive iodine to kill some of the cells in the thyroid gland. Sometimes this treatment destroys so many thyroid cells that your level of thyroid hormone becomes lower than normal. If this happens, you may need to take thyroid hormone pills for the rest of your life.

The other treatment for severe or long-term hyperthyroidism is surgery to remove the thyroid gland. Because there are so many important structures in the area of the thyroid gland, the surgery can have some serious complications. You can reduce the risk by choosing an experienced thyroid surgeon who does the surgery often. After surgery, you will need to take thyroid hormone for the rest of your life.

How long will the effects last?

Often Graves' disease is brought under control after about 8 weeks of treatment with anti-thyroid drugs. However, you will likely need to keep taking the medicine for at least a year. The disease could come back again, so you will need to have regular checkups with your healthcare provider to check your thyroid hormone levels.

If you have a treatment that destroys thyroid cells, you may need to take thyroid hormone the rest of your life.

A serious problem called thyroid storm can happen if Graves' disease is not treated and you have too much thyroid hormone. The buildup of thyroid hormone causes severe restlessness, fever, confusion, sweating, and diarrhea. Your heart may beat very fast and your blood pressure can get very high. Thyroid storm can be a life-threatening emergency. The best way to prevent thyroid storm is to get the symptoms of Graves' disease checked out early and under control. If you are having symptoms of thyroid storm, it's important to call 911 or have someone take you directly to the emergency room.

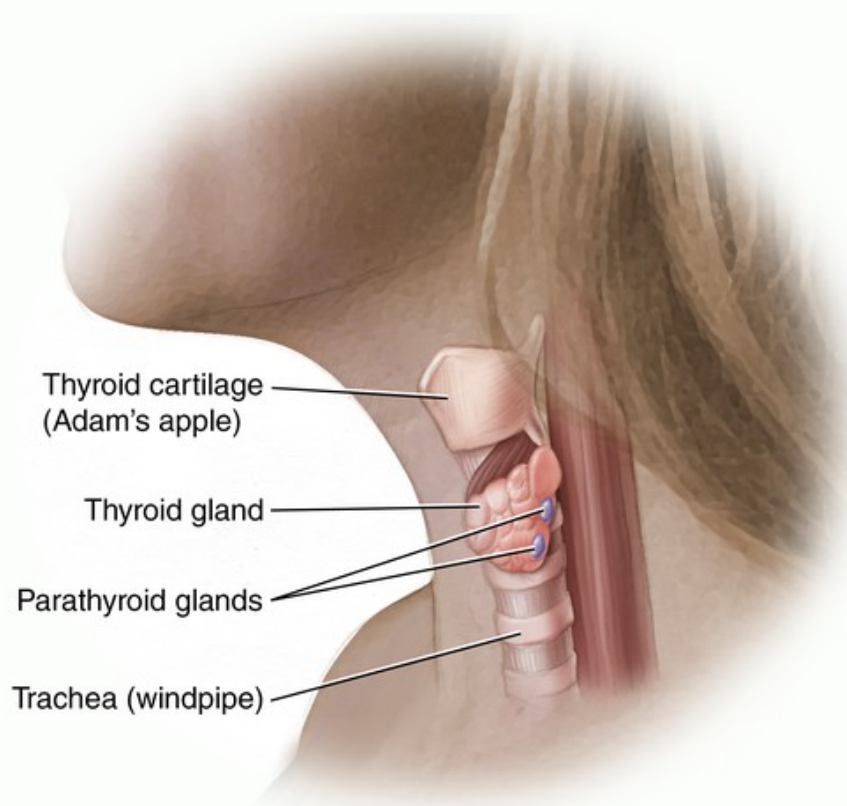
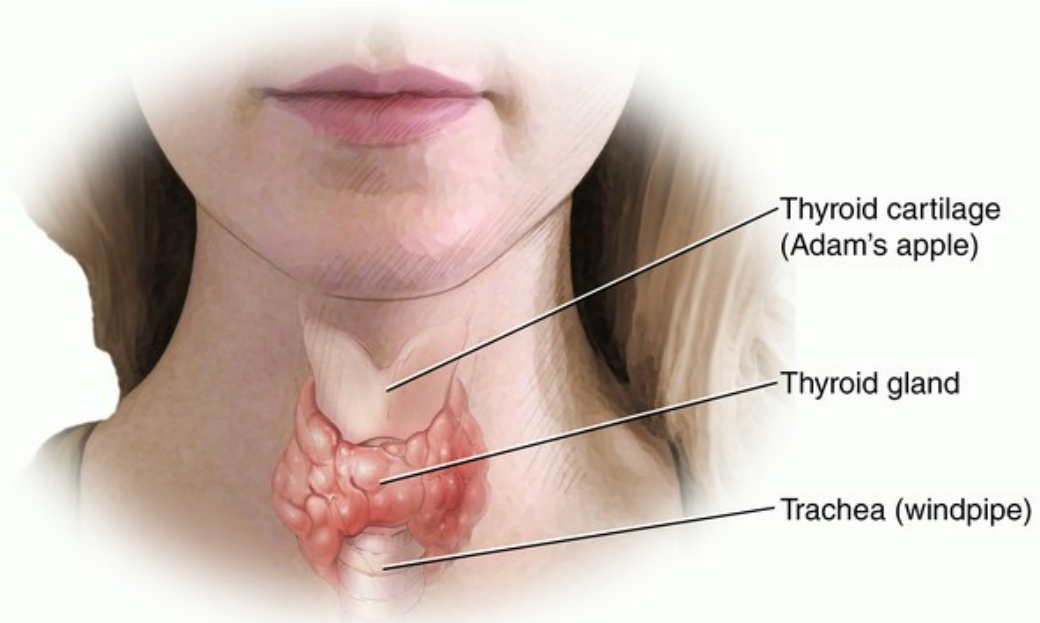
How can I help prevent Graves' disease?

There is no known way to prevent Graves' disease.

Developed by RelayHealth.

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Thyroid and Parathyroid Glands



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