

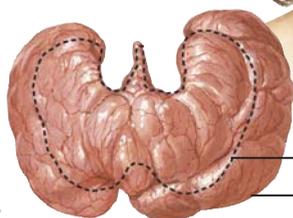
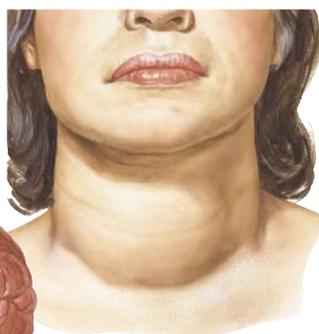
MANAGING YOUR GRAVES' DISEASE



Graves' disease is an autoimmune-disorder, which means that the body's system that fights disease (immune system) attacks itself. The disease causes the thyroid gland to get too big (goiter) and make too much thyroid hormone.

Thyroid gland
Windpipe (trachea)

An overactive thyroid gland leads to abnormal heartbeats, high blood pressure, and nervousness.



Size of normal thyroid gland
Size of enlarged gland

F. Netter M.D.



Graves' disease also causes eye problems, such as bulging of the eyeball, a staring look, blurred vision, and dryness.



Your doctor will do a physical examination, blood tests, and x-rays (ultrasound and radioactive iodine) to diagnose Graves' disease.

What Is Graves' Disease?

The thyroid is an important endocrine gland found in the front of the neck. It produces substances (hormones) that act on metabolism and control mood, weight, and energy. Graves' disease is an autoimmune disease that is the most common cause of too much thyroid hormone being produced (hyperthyroidism). It can affect both sexes but affects primarily women. An autoimmune disease is one in which the immune system of the body attacks itself and destroys healthy organs or tissues.

What Causes Graves' Disease?

The cause is substances called antibodies that stimulate the thyroid to enlarge (goiter) and make too much thyroid hormone. Eye disease can result. It may run in families but cannot be caught from someone else.

What Are the Symptoms of Graves' Disease?

Symptoms include problems with the thyroid, eyes, and rarely the skin. Eye problems include blurred vision, dryness, bulging of the eyeball (exophthalmos), or a staring look. Double vision and blindness can occur if Graves' disease isn't treated.

An overactive thyroid gland results in fast or irregular heartbeat, high blood pressure, diarrhea, weight loss, increased sweating, and nervousness. Long-term complications include heart failure, bone loss (osteoporosis), and stroke.

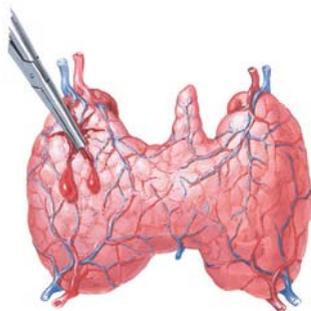
How Is Graves' Disease Diagnosed?

The doctor will make a diagnosis from the medical history, physical examination, and blood tests for thyroid function and antibody levels.

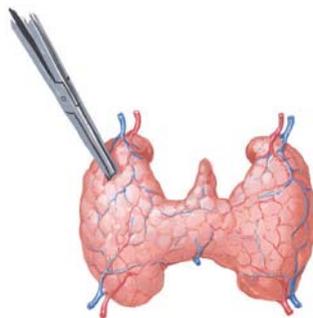
X-rays (ultrasound of the gland and radioactive iodine study) may also be done.

MANAGING YOUR GRAVES' DISEASE

Before treatment—large thyroid that bleeds easily



After drug treatment—smaller thyroid that doesn't bleed easily



Medicines, surgery, or radioactive iodine can be used to prevent the thyroid from making the hormone.



An eye doctor (ophthalmologist) will treat eye problems. Treatment includes eye drops, ointments, laser therapy, medications, and surgery. You should see your eye doctor at least once yearly.



Exercise daily if your doctor says that you can. Regular exercise can improve your sense of well-being and overall health!

Thyroid medicines must be taken exactly as directed, because they leave the body very quickly.



FROM THE DESK OF

NOTES

How Is Graves' Disease Treated?

High thyroid hormone levels and eye problems can both be treated.

Medicine, surgery, and/or radioactive iodine are used for high hormone levels. Medicines such as propylthiouracil (PTU) and methimazole prevent the thyroid from producing hormone. Other medicines that may help are beta-blockers (such as propranolol), which lower the heart rate and reduce the hormone's damaging effect on the heart. These drugs have side effects and should be used with care.

Radioactive iodine usually has few side effects, gives permanent results, and is very effective, but it cannot be used during pregnancy. It can be done as an outpatient or with a short hospital stay. The long-term risk is an underactive thyroid (hypothyroidism), so thyroid supplements may be needed lifelong after radioactive iodine treatment.

People who cannot have radiation therapy or cannot use oral antithyroid medicines may have surgery. Surgery risks include damage to vocal cord nerves and glands that regulate calcium.

An eye doctor (ophthalmologist) should check for eye problems at least once yearly. Treatments for eye disease include laser therapy, surgery, eye drops, medications, and ointments.

DOs and DON'Ts in Managing Graves' Disease:

- ✓ **DO** take your medicines exactly as prescribed. Skipping doses makes medicines useless.
- ✓ **DO** exercise daily if your doctor says you can. Daily exercise can improve your well-being and health.
- ✓ **DO** visit your eye doctor at least once yearly or more, if needed.
- ✓ **DO** call your doctor if you have palpitations, shortness of breath, chest pain, or sudden worsening of nervousness or jitters.
- ✓ **DO** call your doctor if you have eye pain or vision changes, sore throat, fever, chills, nausea, or vomiting.
- ⊗ **DON'T** skip medicine doses.
- ⊗ **DON'T** miss your laboratory test appointments.

FOR MORE INFORMATION

Contact the following source:

• Thyroid Foundation of America

Tel: (800) 832-8321

Website: <http://www.allthyroid.org>