



DISEASES AND CONDITIONS

Oct 7, 2008

Graves' disease

ARTICLE SECTIONS

- [Definition](#)
- [Symptoms](#)
- [Causes](#)
- [When to seek medical advice](#)
- [Tests and diagnosis](#)
- [Complications](#)
- [Treatments and drugs](#)
- [Lifestyle and home remedies](#)

Enter e-mail address

[sign up >>](#)[More Information](#)

Treatments and drugs

There's no treatment to stop your immune system from producing the antibodies that cause Graves' disease. Treatments to control the signs and symptoms of Graves' disease are designed to decrease the production of thyroxine or to block its action. Graves' disease treatment includes:

- **Beta blockers.** These medications, which include propranolol (Inderal), atenolol (Tenormin), metoprolol (Lopressor) and nadolol (Corgard), often relieve hyperthyroid signs and symptoms, such as a rapid heart rate, nervousness and tremors. These medications aren't a cure for Graves' because your body will still produce too much thyroxine, but beta blockers block some of the action of the thyroid hormone. Beta blockers are often used in conjunction with other forms of treatment.
- **Anti-thyroid medications.** These prescription medications, including propylthiouracil and methimazole (Tapazole), prevent your thyroid from producing excessive amounts of hormones. Typically, treatment with anti-thyroid medications continues for at least a year. For some people with Graves' disease, treatment with anti-thyroid medications for one to two years causes a long-term remission of the disease. However, relapse is fairly common. These drugs are often used along with radioactive iodine treatment or surgery to help control signs and symptoms.
- **Radioactive iodine treatment.** To make thyroid hormone, your body needs iodine and uses whatever form of iodine is available in your blood. If you take radioactive iodine, the iodine collects in your thyroid gland, and over time the radioactivity destroys the overactive thyroid cells. This causes your thyroid gland to shrink, and problems lessen gradually, usually over several weeks to several months.

Because this treatment causes thyroid activity to decline, you'll likely later need thyroxine treatment to supply your body with normal amounts of thyroid hormones. Treatment doesn't require a hospital stay.

Radioactive iodine treatment may increase your risk of new or worsened symptoms of Graves' ophthalmopathy. This side effect is usually mild and temporary, but radioactive iodine therapy may not be recommended if you already have moderate to severe eye problems. After radioactive iodine treatment, any iodine not taken up into the thyroid gland is excreted in your urine and saliva.

ADVERTISEMENT

**IMPORTANT
MEDICAL NEWS**
about high blood pressure
and your health

[CLICK HERE TO LEARN MORE >>](#)

Check out these best-sellers and special offers on books and newsletters from Mayo Clinic.

- [Mayo Clinic Book of Alternative Medicine](#)
- [Healthy Living set - Buy 2 books and get 1 free!](#)
- [Get your free trial issue of Health Letter now!](#)

More titles from
[MayoClinic.com Bookstore](#)

[2008's Thyroid Reviews](#)

Ranking Of The Top 3 Thyroid Treatments
Currently Available!

www.ThyroidTreatmentRankings.com

- **Surgery.** If you can't tolerate an anti-thyroid drug and don't want to have radioactive iodine therapy, surgery to remove your thyroid gland (thyroidectomy) is an option. After the surgery, you'll likely need thyroxine treatment to supply your body with normal amounts of thyroid hormones.

Risks of this surgery include potential damage to your vocal cords and your parathyroid glands, tiny glands located adjacent to your thyroid gland. Your parathyroid glands produce a hormone that controls the level of calcium in your blood. Complications are rare under the care of a surgeon experienced in thyroid surgery.

Treating Graves' ophthalmopathy

If Graves' disease affects your eyes (Graves' ophthalmopathy), you can manage mild symptoms by using artificial tears liberally during the day and lubricating gels at night. If your symptoms are more severe, your doctor may recommend:

[Advertising and sponsorship policy](#)

- **Medications.** Treatment with prescription corticosteroids, such as prednisone, may diminish swelling behind your eyeballs.
- **Orbital decompression surgery.** In this surgery, your doctor removes the bone between your eye socket (orbit) and your sinuses — the air spaces next to the orbit. This gives your eyes room to move back to their original position. Possible complications include double vision and lip numbness.
- **Eye muscle surgery.** The inflammation caused by Graves' disease can affect your eye muscles, making them too short to allow the eyes to align properly. In eye muscle surgery, your doctor cuts the muscle where it attaches to your eyeball and then reattaches it farther back. Sometimes, more than one operation is necessary.
- **Prisms.** You may have double vision either because of Graves' disease or as a side effect of surgery for Graves' disease. Though they don't work for everyone, prisms in your glasses may correct your double vision.

Orbital radiotherapy

Orbital radiotherapy was once a common treatment for Graves' ophthalmopathy. Orbital radiotherapy uses targeted X-rays over the course of several days to destroy some of the tissue behind your eyes. However, some studies have suggested that this treatment provides no benefit for people who have mild to moderately severe Graves' ophthalmopathy.

Your doctor may recommend orbital radiotherapy if your eye problems are worsening and prescription corticosteroids alone aren't effective or well tolerated.

[← PREVIOUS](#) | [NEXT: Lifestyle and home remedies →](#)

MORE ON THIS TOPIC

- [Beta blockers](#)
- [Prednisone and other corticosteroids: Balance the risks and benefits](#)

ARTICLE TOOLS

-  [Print](#)
-  [E-mail this](#)
-  [Larger type](#)
-  [Reprints and permissions](#)

visited 10/7/2008

By Mayo Clinic Staff

July 6, 2007

© 1998-2008 Mayo Foundation for Medical Education and Research (MFMER). All rights reserved. A single copy of these materials may be reprinted for noncommercial personal use only. "Mayo," "Mayo Clinic," "MayoClinic.com," "EmbodyHealth," "Reliable tools for healthier lives," "Enhance your life," and the triple-shield Mayo Clinic logo are trademarks of Mayo Foundation for Medical Education and Research.

DS00181

[About this site](#) | [Contact us](#) | [Site help](#) | [e-Newsletter](#) | [Site map](#) | [Reprints and permissions](#) | [Advertise with us](#)

[Privacy policy](#) updated Jul 1, 2008

[Terms and conditions of use](#) policy updated Jun 20, 2008

LEGAL CONDITIONS AND TERMS OF USE APPLICABLE TO ALL USERS OF THIS SITE. ANY USE OF THIS SITE CONSTITUTES YOUR AGREEMENT TO THESE TERMS AND CONDITIONS OF USE.

© 1998-2008 Mayo Foundation for Medical Education and Research. All rights reserved.



ACCREDITED