



Gynecomastia

WHAT IS GYNECOMASTIA?

Gynecomastia is breast enlargement in boys or men due to a benign (non-cancerous) increase in breast tissue. This condition results from an imbalance between testosterone (a male hormone) and estrogen (a female hormone). All males have some estrogen. But too much estrogen can cause breasts to grow.

- Some health problems
 - Conditions that result in low testosterone levels (called hypogonadism), such as Klinefelter syndrome or pituitary gland problems
 - Overactive thyroid gland (hyperthyroidism)
 - Liver disease
 - Kidney disease and kidney failure
 - Tumors of the testicles, adrenal glands, or pituitary gland

However, sometimes no cause is found.

DID YOU KNOW?

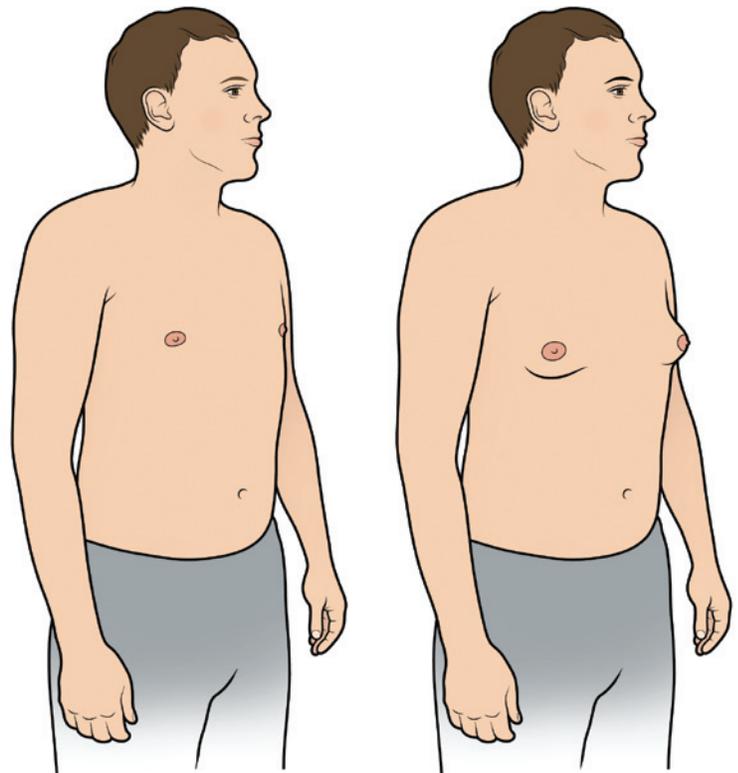
Although gynecomastia doesn't cause health problems, it can make breasts tender. It can also be embarrassing.

WHO DEVELOPS GYNECOMASTIA?

Gynecomastia is common in newborn boys due to exposure to their mother's estrogen. It also can occur in boys going through puberty. In both cases, it usually goes away on its own. In adults, it's most common in men over the age of 50 years.

WHAT CAUSES GYNECOMASTIA IN ADULTS?

- A number of factors can cause enlarged breasts in men:
- The hormonal changes of aging (having less testosterone and more estrogen)
 - Increased body fat, which can increase estrogen levels
 - Medicines and other substances (see table on page 2)



MEDICINES AND OTHER SUBSTANCES THAT CAN CAUSE GYNECOMASTIA

Hormones

Medicines that prevent the production or block the action of male sex hormones, such as treatment for prostate cancer

Some antibiotics

Some anti-ulcer medicines

Some cancer treatments (chemotherapy)

Some medicines for heart and blood vessel disease

Some medicines for psychiatric conditions, such as anxiety, depression, and psychotic disorders

Alcoholic beverages (drinking too much)

Illegal drugs: amphetamines, anabolic steroids and androgens (used by some bodybuilders or athletes to improve performance), heroin, and marijuana

Some over-the-counter drugs, herbal supplements with phytoestrogens (plant substances that are like estrogen), and lotions, such as those containing lavender or tea tree oil

HOW IS GYNECOMASTIA DIAGNOSED?

Your doctor will ask questions about your medical conditions and usual medicines, including over-the-counter medicines. In a physical exam, your doctor will check your breast tissue to see if the enlargement is gynecomastia or another condition. Other causes of enlarged breasts include fat deposits, benign tumors, and fluid-filled pouches (cysts). The doctor will look for signs of breast cancer, a rare condition in men. Your doctor also will check your testicles for size and for the presence of a tumor.

Your doctor may recommend other tests:

- Blood tests to check hormone levels
- Tests to see whether the liver, kidneys, and thyroid are working properly
- Imaging tests, such as ultrasound or a CT scan to look for tumors
- A mammogram to rule out breast cancer

WHAT IS THE TREATMENT FOR GYNECOMASTIA?

In some cases, no treatment is needed. In other cases, the treatment depends on the factors causing the enlargement. If a medicine or other substance is the cause, your doctor may recommend you stop using it, or switch you to a different medicine. If a disease is the cause, you will be treated for the disease as needed.

Other treatments include

- Medicines that block the effect of estrogen in breast tissue (especially for men who have had gynecomastia for a short time).
- Surgery to remove breast tissue (especially for men who have a lot of breast tissue or who have had gynecomastia for a long time). However, surgery usually isn't done until the cause of the enlargement has been treated.

WHAT SHOULD YOU DO IF YOU'RE WORRIED ABOUT ENLARGED BREASTS?

It's best to talk it over with your doctor. Tests can identify the cause of the enlarged breasts. If the enlargement is temporary, your doctor can offer reassurance. If treatment is needed, your doctor can discuss the options with you.

Questions to ask your doctor

- Why are my breasts enlarged?
- What are my options for treatment?
- What are risks and benefits of each treatment option?
- Should I see an endocrinologist?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Mayo Clinic information about gynecomastia: www.mayoclinic.com/health/gynecomastia/DS00850
- MedlinePlus: www.nlm.nih.gov/medlineplus/ency/article/003165.htm
- FamilyDoctor.org: <http://familydoctor.org> (search for breast problems in men)
- Children's Hospital Boston: www.childrenshospital.org/az/Site978/mainpageS978P1.html

EDITORS

Bradley D. Anawalt, MD
Glenn D. Braunstein, MD
Alvin M. Matsumoto, MD

The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

