

## Gynecomastia — Male

**Gynecomastia** is a benign (noncancerous) enlargement of the male breast. It may occur in one or both breasts from birth to old age.

### Infant Gynecomastia

At birth, male babies may have enlarged breasts that produce a small amount of milky discharge. This period of gynecomastia comes from the high levels of the mother's hormones that the baby receives before birth. The condition may last for weeks and may even extend to months for those babies who are breast-fed. This is a normal condition. The gynecomastia gradually resolves itself and the male child's breasts return to normal.

### Adolescent Gynecomastia

Gynecomastia often occurs at puberty. Gynecomastia may result when the hormones begin to fluctuate between the ages of 11 and 17. The exact hormonal change that causes gynecomastia is not well understood. This type of gynecomastia, called **pubertal gynecomastia**, affects both breasts in about 75 percent of cases; the remaining cases involve one breast. The glandular tissues under the nipple and areola enlarge, feel rubbery and may be tender. The condition is transient, usually passing unnoticed or resolving in several months. However, for a few young males, the condition may persist for two years or longer. Occasionally, the condition will require surgery. Surgery consists of removing only the glandular tissue, leaving the nipple and areola intact.

### Adult Gynecomastia

Gynecomastia may also occur in the later stages of life between 50 and 70 years. The breasts may become enlarged under the nipple, feel rubbery and tender. The condition is usually in both breasts. However, the enlargement may start in one breast and then include the other. Bilateral (both breasts) gynecomastia is usually a symptom of a hormonal imbalance, medications or underlying disease but is not related to cancer of the breast. Cancer of the breast usually is associated with a hard, stony mass in one breast or, occasionally, a nipple discharge from one breast.

### Causes of Gynecomastia

1. **Hormonal** (both breasts 75% of the time)
  - Normal fluctuation of hormones
  - Underlying disease causing hormonal change
    - Klinefelter's syndrome
2. **Secondary to other diseases** (usually both breasts)
  - Cirrhosis of the liver
  - Chronic liver disease
  - Thyroid disease
  - Infectious hepatitis
  - Tumor of the liver
  - Starvation
  - Chronic lung disease
  - Pituitary tumor

### 3. Drug Related (both breasts)

#### ■ Antacids

Cimetidine  
Ranitidine

#### ■ Antibiotics

Isoniazid  
Metronidazole

#### ■ Anti-hypertensive (Blood Pressure)

Guanabenz  
Methyldopa  
Reserpine

#### ■ Anti-nausea

Prochlorperazine  
Thiethylperazine

#### ■ Anti-Neoplastic (Cancer)

Busulfan  
Methotrexate  
Procarbazine  
Vincristine

#### ■ Cardiac (Heart)

Calcium channel blocker  
Digoxin  
Propranolol

#### ■ Diuretics (Fluid Control)

Amiloride  
Spironolactone  
Thiazide

#### ■ Hormones/Hormone-like

Clomiphene  
Diethylstilbestrol  
Estramustine  
Estrogen  
Flutamide  
Leuprolide  
Tamoxifen

#### ■ Narcotics

Heroin  
Methadone

#### ■ Tranquilizers

Chlorpromazine  
Fluphenazine  
Perphenazine  
Thioridazine  
Trifluoperazine

#### ■ Other

Auranofin  
Amphetamines  
Anabolic steroids  
Diazepam  
D-Penicillamine  
Ergotamine tartrate  
Ketoconazole  
Marijuana  
Neuroleptic drugs  
Phenothiazines  
Sulindac  
Theophylline  
Tricyclics

### 4. Cause Not Known (usually one breast)

#### Diagnosing Gynecomastia

Bilateral (both breasts) gynecomastia usually is time-limited and resolves within months. When it is persistent, physicians will look at medications or for an underlying disease. The hormone levels of the body (estrogen, testosterone, prolactin, luteinizing hormone, and follicle-stimulating hormone) can determine if there is a hormonal imbalance. If the gynecomastia is unilateral (one breast), a physician will closely evaluate the area by feeling for signs of a lump or thickening and may recommend a mammogram in order to rule out cancer.

## **Treatments for Gynecomastia:**

### **Puberty**

Gynecomastia during puberty is not treated because it usually diminishes over several months. However, if it extends over a longer period of time, an underlying cause will be investigated and, occasionally, surgical removal of the glandular tissues may be considered. An incision is made around the edge of the areola and the enlarged breast tissues are removed, leaving the nipple and areola intact with no noticeable visible evidence of a surgical scar.

### **Adult**

Adult gynecomastia, like pubertal, can occur as a result of hormonal fluctuations and usually disappears in several months. Observation is usually the first line of treatment if no hard mass is present. Because adult-onset gynecomastia may result from medications, the intake of all medications (over-the-counter and prescription) should be considered. If a medication is the cause of the enlargement, a physician can review the drug for an alternate one that does not have the same side effect. Remember: gynecomastia does not increase the risk for cancer and the concern is cosmetic. If the condition continues, physicians will look for an underlying disease and, if found, the disease will be treated. If the condition is hormonally related, hormones may be given. Occasionally, surgery may also be needed for persistent gynecomastia.

The greatest concern is when one breast experiences enlargement. Since cancer usually occurs in one breast and has a firm distinct lump, any singular breast enlargement needs close examination by a physician.