Gynecomastia is usually strictly defined as the visible or palpable development of breast tissue in men. The term comes from the Greek words gyne meaning "woman" and mastos meaning "breast." In practical terms, this means abnormally large breasts on men. This is often related to the occurrence of excess fat or, less frequently, overdeveloped muscles.

The condition is relatively common in adolescent boys, and 90% of the time symptoms disappear in a matter of months, or, as adolescence wanes, a few years later. But the remaining 10% are burdened with a social handicap that causes a deep and complex shame, and often puts a man’s relationship with his body into an altered state.

Drugs, medications, hormonal imbalance, genetic conditions, and exogenous hormones can all cause gynecomastia. During puberty it is normal for most boys to develop some proliferation of breast tissue. This is often made known by the onset of pain in the nipples or sub-areolar region. Ordinarily this condition is self-limited and subsides within 6 to 18 months. When this gynecomastia persists, it is often embarrassing and psychologically debilitating. Removal of the excess breast parenchyma is the only effective treatment. This condition can be accentuated if the patient is overweight. Marijuana usage is commonly linked to gynecomastia. Men who are taking estrogens or testosterone inhibitors because of prostate cancer or patients with liver disease who have a hormonal imbalance are also susceptible to this condition. Gynecomastia can develop as a result of taking anabolic steroids to enhance athletic performance or bodybuilding. Appropriate diagnostic studies are necessary prior to treatment, particularly in individuals taking anabolic steroids. These patients should also be evaluated for liver and cardiac disease prior to correction the gynecomastia.

Gynecomastia can be emotionally devastating. Feelings of shame, embarrassment and humiliation are common. Men often do not feel masculine in a society where masculinity is exalted. Lack of self-confidence commonly threads itself through many aspects of the individual's life. A man or boy with gynecomastia struggles with anxiety over such simple acts as taking off his shirt at the beach or participating in gym classes in grade school or high school. Men often have a very difficult time talking about their breasts to anyone, but it is the first step toward relief. Realizing that they are not alone and that there is a cure offer powerful remedies and a major advancement toward healing.

CLASSIFICATION OF GYNECOMASTIA

Gynecomastia has been divided into four types:

**Type I** is known as pubertal or benign adolescent breast hypertrophy. This refers to the quite common situation seen in pubertal males. It usually presents between ages 10 to 14. The incidence may be as high as 60-70%. It is typically a firm, tender, subareolar mass anywhere from 1-5 cm in diameter. These young men frequently complain of pain in the breasts to the touch or when wearing tight clothing. It usually spontaneously resolves within 2 years or less.

**Type II** is the condition where there is natural gynecomastia without evidence of underlying disease, or with evidence of organic disease (including the use of certain drugs). This type refers to a generalized, nonpainful breast enlargement. In this type it is helpful to differentiate between naturally occurring gynecomastia versus breast enlargement due either to an abnormal (pathologic) process or to the use of certain drugs. Careful history taking regarding the time of onset, family history, duration of enlargement, history of systemic illness, weight change, and drug or medication use, is important.
GYNECOMASTIA
TYPES AND TREATMENTS

Physical examination should include height, weight, blood pressure, breast size, and careful palpation of both breasts and genitals, in addition to a neurological assessment.

**Type III** gynecomastia is general obesity simulating gynecomastia or the occurrence of excess fat in and around the breast or chest area. This is probably the most often seen type.

**Type IV** is hypertrophy of the underlying pectoral muscle.

CLASSIFICATION OF CAUSES OF TYPE II GYNECOMASTIA

I. Idiopathic (no known cause)

II. Familial causes
   a. Associated with anosmia (lack of smell) and testicular hypertrophy.
   b. Reifenstein’s syndrome (male pseudohermaphroditism secondary to partial androgen insensitivity).
   c. Associated with hypogonadism and small penis.

III. Specific illnesses or syndromes
   a. Kleinfelter
   b. Male pseudohermaphroditism
   c. Testicular feminization syndrome
   d. Tumors
   e. Leukemia
   f. Hemophilia
   g. Leprosy
   h. Chronic glomerulonephritis

IV. Miscellaneous drugs
   a. amphetamines
   b. anabolic steroids
   c. birth control pills
   d. cimetidine
   e. diazepam
   f. corticosteroids
   g. digitalis
   h. estrogens
   j. human chorionic gonadotropin
   k. insulin
   l. isoniazid and other TB drugs
   m. ketoconazole
   n. marijuana
   o. methadone and other narcotics
   p. reserpine
   q. tricyclic antidepressants
EVALUATION OF PATIENTS WITH GYNECOMASTIA

The history and physical exam are important. Most patients have an unremarkable history with no significant risk factors present. It is the physical exam that helps to define the nature and the extent of gynecomastia, and thus, the treatment plan. Careful palpation is performed with the intention of determining the features of the anatomy that contribute to the gynecomastia. First, careful examination of the nipple, areolae and sub-areolar region is performed. The doctors are looking for abnormality in the nipple or a nipple discharge or problems with the pigmented areolar region. Careful palpation of the tissue beneath the areolae helps to define a slightly firm “discoid” area that is usually the breast tissue. It is important to determine if it is round, slightly firm and well circumscribed which is normal, versus hard, gritty, irregular and painful, which may signify male breast cancer (which can happen but is rare). Next the extent and degree and thickness of the fatty accumulation in and around the chest and breast tissue is determined. This can sometimes extend into the armpit. Placing the hands on the hips and pushing hard contracts the pectoral muscle. Here is determined the thickness and extent of the muscle and any difference from right to left. The hands are placed over the chest to feel the ribs and especially their shape and contour, as wide flaring ribs can sometimes make the chest and breast look larger. The result of this examination is to determine if the gynecomastia is due to breast tissue, fat tissue, thick muscle or rib contour, and the extent of the contribution from each of these.

TREATMENT OPTIONS FOR GYNECOMASTIA

Treatment usually involves one or the other or both suction-assisted lipectomy to reduce the fatty tissue in the chest wall and direct excision to remove the breast tissue in the central subareolar region. The breast tissue cannot be removed by suction lipectomy alone. Some doctors believe this is possible but I do not agree. In some cases suction assisted lipectomy alone effectively reduces the bulk of breast fullness, but this is only in men who have gynecomastia solely related to excess body fat in this region. A combination of liposuction and direct excision procedure is necessary for most patients. The suction lipectomy is performed through a small incision in the armpit and at the edge of the areolae. Ultrasonic liposuction is usually preferred as it is more effective in “liquefying” and removing the very dense and tough fat in this region. Then a small incision is made at the edge of the areola to remove the subareolar breast tissue in this location. Rarely, such significant skin excess and hanging loose skin (ptosis) exists that a combined or two-stage procedure is needed. First suction lipectomy removes the bulk of the fat tissue and direct excision of the breast tissue is performed. This allows for contraction of the subcutaneous tissues and overlying skin. The excess skin significantly contracts as the postoperative edema slowly subsides. At a second procedure, after the skin has contracted as much as possible, if there is still excess, then it can be removed by a minimum of incisions, usually limited to around the areolae. Regardless of the procedure the goal is to create a flattened but not concave appearance, thereby avoiding the unattractive “saucer” deformity that develops when too much central breast tissue is resected.

POSTOPERATIVE CARE AND RECOVERY

The surgery is usually done under a light general anesthesia. It takes about 1-2 hours. It is performed on an outpatient basis. There is a foam padded dressing placed beneath a tight elastic vest. This is worn for about three weeks, but can be removed at any time for bathing, starting after the second day. There is only a
minimal of bruising. There is usually only mild to moderate discomfort that is usually easily relieved with medications. The result is noticeable immediately and only gets better in time. The result lasts forever. Even if men put on some weight it will not look as large in the chest. Patients are consistently delighted with their results and often ask “Why didn’t I do this sooner?”

For further information or to answer any questions please contact James Romano, MD at 415-981-3911 or www.jromano.com.