

A photograph of a man's torso, showing his chest and abdominal muscles. He has a noticeable enlargement of the breast tissue on his left side, which is a sign of gynecomastia. The image is set against a dark background. Overlaid on the top part of the image is a dark rectangular box containing white text. At the bottom, there is a white banner with a black border containing the name of the doctor.

**YOUR GUIDE TO UNDERSTAND**

# **GYNECOMASTIA**

**MIGUEL DELGADO, MD**

Gynecomastia is a commonly misunderstood condition. The appearance of enlarged male breasts can result in low self-esteem, feelings of shame, embarrassment, and often an unwillingness to participate fully in the activities you enjoy.

Understanding your condition can go a long way toward helping you cope with its challenges, speak freely about it with others, and explore treatment options.

I hope you find this handbook helpful.

- Miguel Delgado, M.D.

# Your Guide to Understanding Gynecomastia

Miguel Delgado, MD

# TABLE OF CONTENTS

Page 05	<b>What is Gynecomastia?</b> What is Pseudogynecomastia?
Page 06	<b>The Emotional Impact of Gynecomastia</b> Tips for Camouflaging Enlarged Male Breasts
Page 07	<b>Causes of Gynecomastia</b> Hormonal Imbalances Anabolic Steroids Medications
Page 09	<b>Can Gynecomastia Be Prevented?</b> Tips for Lowering Your Risk of Developing Gynecomastia
Page 11	<b>Common Misperceptions About Gynecomastia</b> Oral Medications Diet and Exercise Cancer
Page 12	<b>What is the Most Effective Treatment for Gynecomastia?</b>

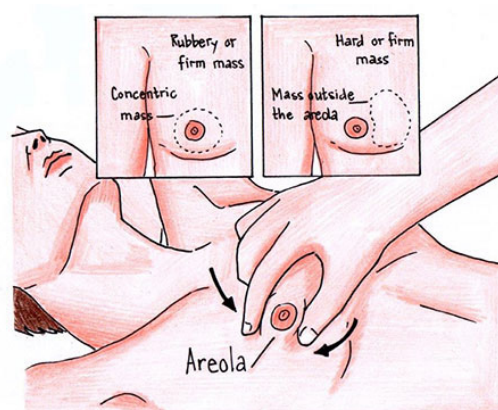


## What is Gynecomastia?

The term gynecomastia comes from the Greek word, gynaik, meaning "female" and mastós meaning "breast."

Gynecomastia is also commonly referred to as "manboobs."

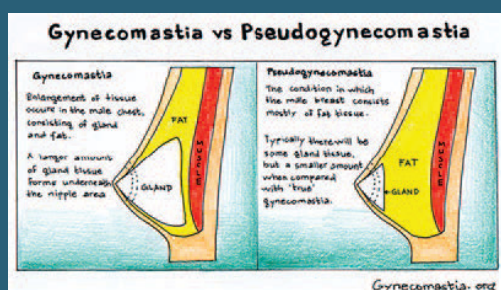
The most obvious symptom of Gynecomastia is the appearance of a rubbery or firm mass that can be easily felt under the nipple. Fat deposits surrounding the area make it appear larger and more prominent. If the condition occurs in adolescence, it may resolve on its own, typically within 18 months to two years after its initial development. If not, it will most likely be permanent. Gynecomastia is easily visualized and diagnosed upon physical examination.



Gynecomastia.org

## What is Pseudogynecomastia?

Pseudogynecomastia is a condition in which fat accumulates in the chest region, creating enlarged male breasts. The condition is similar to gynecomastia; however, the chest area does not contain glandular breast tissue. Pseudogynecomastia is typically caused by excessive weight gain and can be greatly improved through weight loss. The fatty tissue surrounding the chest can be treated successfully with liposuction alone, versus liposuction and surgery.



Gynecomastia.org

# The Emotional Impact of Gynecomastia

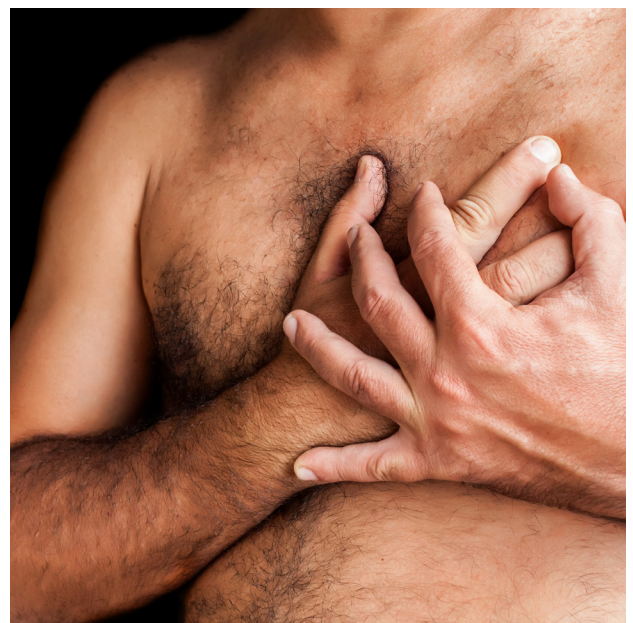
While the physical condition is reversible and treatable, the psychological effects can be devastating. Young men with gynecomastia may suffer from low self-esteem, loss of self-confidence, embarrassment, and insecurities about sexual performance. Many shy away from relationships with women for fear of rejection and steer clear of any sport that requires undressing.

Therefore, treatment of gynecomastia should address not only the physical issues, but the emotional impact as well. A consultation with a medical expert to determine the course of action is critical. The sooner the physical condition is addressed, the better the chances of reducing and/or eliminating any lasting emotional scars.



## Tips for Camouflaging Enlarged Male Breasts

There are multiple ways to hide the fullness of the chest. Many men wear a tight compression undergarment that flattens the chest area or a slimming body shaper shirt. Loose-fitting shirts are very helpful, especially shirts with pockets in the chest area. Darker-colored shirts hide more than lighter-colored shirts. Compression swim shirts are also available.



# Causes of Gynecomastia



## 01 Hormone Imbalance

The most common cause of gynecomastia is a hormonal imbalance between testosterone and estrogen. Testosterone controls male characteristics, including muscle mass and hair growth, while estrogen controls female characteristics, such as the growth of breasts. Both hormones are present in men and boys, although normally estrogen is produced in small quantities. A decrease in testosterone and/or an increase in male estrogen levels can cause gynecomastia.

## Adolescent Gynecomastia 02

Natural hormone changes that occur during puberty can cause adolescent gynecomastia. This condition is relatively common, and in most cases, the enlarged breast tissue will resolve on its own within 18 months to two years.



## 03 Anabolic Steroids & Androgens

Steroids are the second most common cause of male breast enlargement today. While these compounds stimulate muscle growth, they can also cause an increase in estrogen, causing breast tissue to develop.



# 04 Medications

Over the years, a variety of medications have been implicated in the development of gynecomastia. The more common drugs are listed below:

<b>Antiandrogens</b>	Bicalutamide, flutamide, finasteride, dutasteride
<b>Antihypertensive</b>	Spirolonolactone
<b>Antiretroviral</b>	Protease inhibitors (saquinavir, indinavir, nelfinavir, ritonavir, lopinavir), reverse transcriptase inhibitors (stavudine, zidovudine, lamivudine)
<b>Environmental Exposure</b>	Phenothrin (antiparasitical)
<b>Exogenous Hormones</b>	Oestrogens, prednisone (male teenagers)
<b>Gastrointestinal Drugs</b>	H2 histamine receptor blockers (cimetidine)
<b>Antifungal</b>	Ketoconazole (prolonged oral use)
<b>Antihypertensive</b>	Calcium channel blockers (amlodipine, diltiazem, felodipine, nifedipine, verapamil)
<b>Antipsychotic (first generation)</b>	Haloperidol, olanzapine, paliperidone (high doses), risperidone (high doses), ziprasidone
<b>Antiretroviral</b>	Efavirenz
<b>Chemotherapy Drugs</b>	Cisplatin, vincristine, procarbazine
<b>Exogenous Hormones</b>	Androgens (athletes abuse)
<b>Gastrointestinal Drugs</b>	Proton pump inhibitors (omeprazole)
<b>Cardiovascular Drugs</b>	Phytoestrogens (soy-based products, high quantity)

**Note:** Tumors and marijuana rarely cause gynecomastia.



# Can Gynecomastia Be Prevented?

If you are genetically predisposed to develop adolescent gynecomastia, there is no way to prevent it; however, there are a few actions you can take to reduce the risk of developing adult gynecomastia.

**01**

**Stay away from illegal drugs,** including steroids and androgens, amphetamines, heroin, and marijuana.

**04**

**Read the fine print on any medications or herbal supplements** you purchase in a bodybuilding store or on the internet.

**02**

**Avoid taking estrogen blockers,** particularly in combination with steroids as the results are highly unreliable.

**05**

**Check your medications.** If you are prescribed a medication known to cause gynecomastia, consult with your doctor about other options.

**03**

**Maintain a healthy weight,** especially as you age. Excessive fat can increase estrogen levels.

**06**

**Lose weight to help control and / or prevent Pseudogynecomastia.**

# DIETARY GUIDANCE

As men age, testosterone levels naturally decline while estrogen levels increase. You can help reduce your estrogen levels by making healthy dietary choices:

- Increase the amount of fiber in your diet
- Add cruciferous vegetables to your meals
- Avoid excessive alcohol consumption
- Limit dairy intake
- Avoid beef made from animals given a diet that includes hormone supplements
- Drink at least eight glasses of water daily

# Common Misperceptions About Gynecomastia

“Oral Medications can be used to treat gynecomastia.”  
Unfortunately, there is no medication available that works reliably to treat gynecomastia.

## Anti-Estrogen Drugs

Many bodybuilders take anti-estrogen drugs before taking anabolic steroids. The estrogen blocker may or may not block the conversion of testosterone to estrogen. Also, the drug cannot remove the breast gland once it has developed.

## Herbal Supplements

Several gynecomastia pills are currently on the market, including Gynexin, Gynectrol, and GyneMax. Gynexin is by far the most popular. It is essentially a fat burner that specifically targets the adipose tissue (fat) in the breasts. While it may work to reduce fat, it does not address the underlying cause of gynecomastia: the development of glandular breast tissue. Explore the [Gynecomastia.org](https://www.gynecomastia.org) Forum to read about experiences of men who have taken this drug and other gynecomastia oral medications.

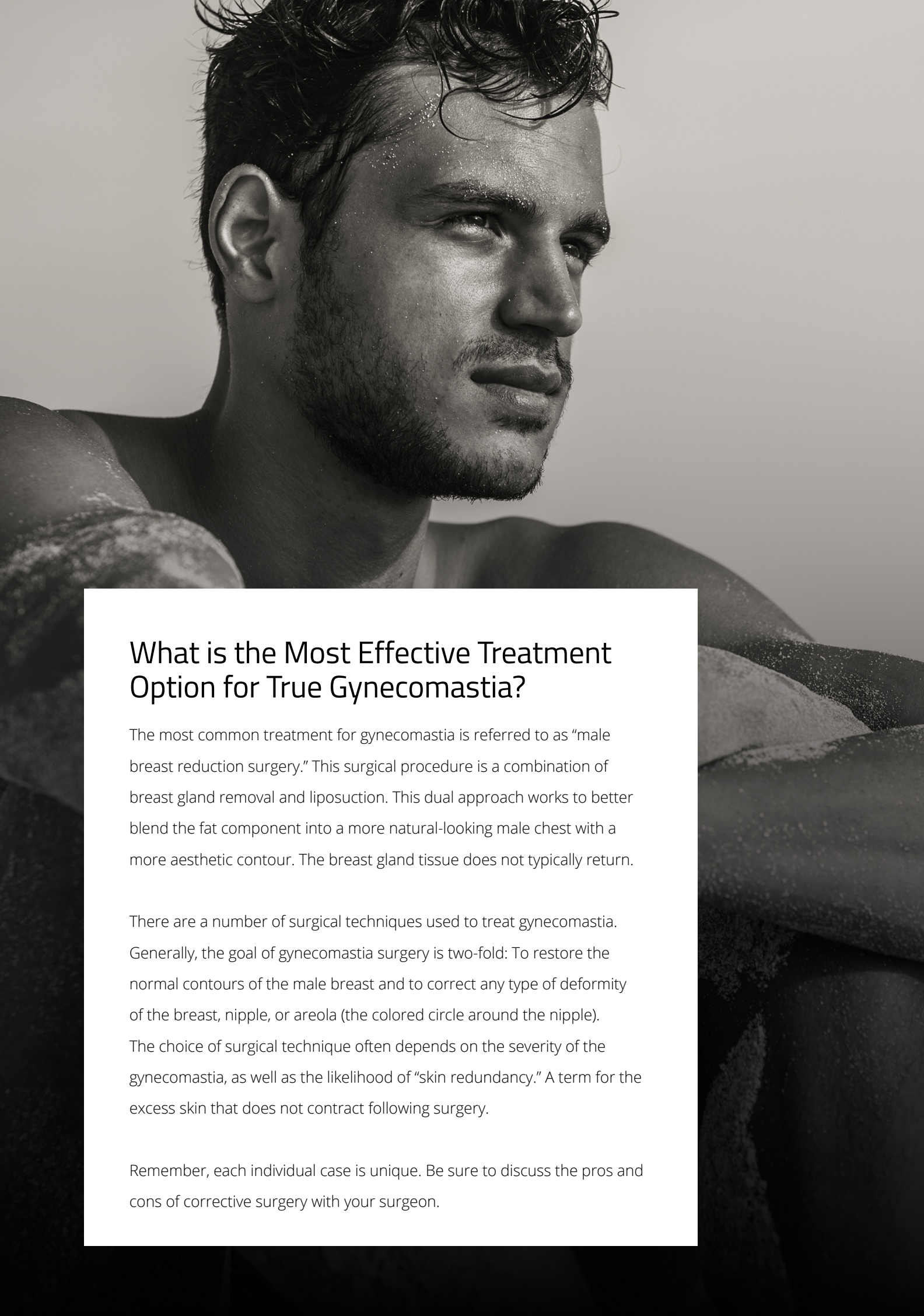
## “Diet & Exercise Can Eliminate Gynecomastia”

The majority of men with gynecomastia have a fat component around the breast gland, and this fat can be reduced through diet and exercise; however, the breast gland tissue still remains. Diet and exercise can help in the case of pseudogynecomastia.

## “Gynecomastia Causes Cancer”

Gynecomastia is a noncancerous excess of male breast gland tissue. Men who have gynecomastia may have a slightly increased risk of male breast cancer due to the imbalance ratio of estrogen to testosterone in the body. Other risk factors include a family history of breast cancer, Jewish heritage, a family history of a breast cancer gene mutation, and other genetic disorders.

Although gynecomastia is common, male breast cancer is rare. In the United States, approximately 2,000 cases of male breast cancer are diagnosed annually, and roughly 400 men die of breast cancer each year.



## What is the Most Effective Treatment Option for True Gynecomastia?

The most common treatment for gynecomastia is referred to as “male breast reduction surgery.” This surgical procedure is a combination of breast gland removal and liposuction. This dual approach works to better blend the fat component into a more natural-looking male chest with a more aesthetic contour. The breast gland tissue does not typically return.

There are a number of surgical techniques used to treat gynecomastia. Generally, the goal of gynecomastia surgery is two-fold: To restore the normal contours of the male breast and to correct any type of deformity of the breast, nipple, or areola (the colored circle around the nipple). The choice of surgical technique often depends on the severity of the gynecomastia, as well as the likelihood of “skin redundancy.” A term for the excess skin that does not contract following surgery.

Remember, each individual case is unique. Be sure to discuss the pros and cons of corrective surgery with your surgeon.



MIGUEL DELGADO, M.D.

---

**DR-DELGADO.COM**

## Novato

165 Rowland Way, Suite #300  
Novato, CA 94945

**415.898.4161**

## San Francisco

450 Sutter St., #2433  
San Francisco, CA 94108

**415.989.2221**