

TREATMENT OF GYNAECOMASTIA

Patient information to assist informed consent

Gynaecomastia is an excessive enlargement of the male breast. Pronounced guy-nee-co-mass-tee-ah, it may affect one or both breasts. For some teenage boys and adult men, it can be a normal occurrence at a certain stage of life. Although men and boys who have gynaecomastia often find it embarrassing, it is a common condition.

The development of breast tissue is influenced by hormones called oestrogens that are usually at a low level in men. However, oestrogens may have a bigger role at different times in a man's life. In the newborn period, when oestrogens from the mother are still present in the baby boy, gynaecomastia can occur during the first few weeks of life.

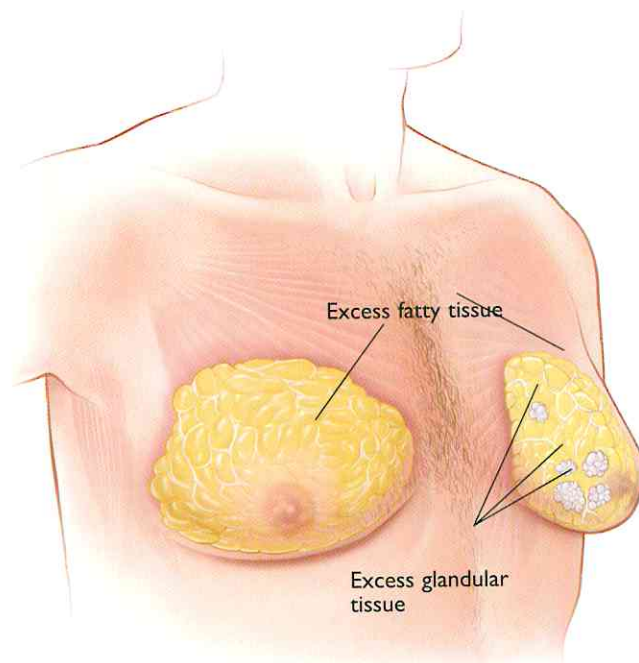
During puberty, due to an imbalance between the changing levels of male and female hormones, a tender gynaecomastia may develop in one or both breasts. Most boys with gynaecomastia at this stage of life grow out of it within a couple of years or by the time they are about 20 years old.

In older, otherwise healthy men, about four men in 10 develop gynaecomastia due to changes in metabolism that cause a slight increase in oestrogen production.

Gynaecomastia may also be due to a range of other abnormal causes. These include liver disease, medication taken for other health problems, non-prescription medication such as steroids, or underlying changes in the production of male and female hormones that can occur for a variety of reasons.

Gynaecomastia may be improved by non-surgical treatments (such as changing a medication) or by medically treating the cause of the abnormal hormone levels.

For some men, surgery to remove the excess breast tissue may be the best treatment option.



EXAMINATION AND DIAGNOSIS

Excess breast tissue in men with gynaecomastia is composed of fatty tissue and mammary gland tissue. Some male breasts contain mainly fatty tissue, while others contain mainly glandular tissue, or they may be made up of both. Extra skin can also make the breasts look larger.

After an examination, your surgeon may require further tests such as a mammogram or ultrasound to determine the make-up of breast tissue and to plan the best surgical approach. These investigations will also check for the presence of breast cancer, which is highly unlikely.

IMPORTANT: FILL IN ALL DETAILS ON THE STICKER

DEAR SURGEON: When you discuss this pamphlet with your patient, remove this sticker, and put it on the patient's medical history or card. This will remind you and the patient that this pamphlet has been provided. Some surgeons ask the patient to sign the sticker to confirm receipt of the pamphlet.

TREATMENT INFORMATION PAMPHLET

PEEL HERE

PROCEDURE: _____
PATIENT'S NAME: _____
DOCTOR'S NAME: _____
EDITION NUMBER: _____ DATE: DD / MM / YYYY

YOUR PLASTIC SURGEON

AUSTRALIA PLASTIC
SURGERY

Talk to your surgeon

This pamphlet is intended to provide general information. It is not a substitute for advice from your surgeon and does not contain all the known facts about the surgical treatment of gynaecomastia. This information will change with time, due to clinical research and new therapies.

If you are not sure about benefits, risks, or limitations of treatment, or related matters, ask your surgeon. Read this pamphlet carefully, and save it for reference. Terms are used that may require further explanation by your surgeon. Write down questions you want to ask. Your surgeon will be pleased to answer them.

You are encouraged to discuss with your surgeon:

- the result you want
- the surgery to be done, and why
- the outcome you can expect.

Seek the opinion of another doctor if you are uncertain about the advice you are given. Use this pamphlet only in consultation with your surgeon.

Consent form: If you decide to have treatment, your surgeon will ask you to sign a consent form. Read it carefully. If you have questions, ask your surgeon.

PRINCIPLES OF TREATMENT

The main reasons for seeking surgical treatment for gynaecomastia include:

- failed medical treatment; this can occur if the gynaecomastia has been present for a long time, and the breast tissue has been replaced by fibrous tissue that does not respond to hormone treatment.
- cosmetic or psychological; some men with gynaecomastia may feel self-conscious about the appearance of their breasts.
- discomfort; breast tissue can be tender and sore.
- rarely, suspected malignancy.

In the following cases, surgical treatment is not normally recommended because it is less likely to be successful, and the risks are higher:

- in overweight men who have not tried proven weight-loss techniques such as diet and exercise (but disproportionate breasts can be surgically improved)
- heavy drinking of alcohol
- heavy smoking of marijuana.

Loss of body fat, or reduction of alcohol or marijuana intake, often improves gynaecomastia, thus making surgery unnecessary.

Surgery for gynaecomastia is most

successful when performed on healthy, well-balanced men of any age, particularly those with firm skin (around the breast area) that can respond to the surgical reshaping.

In younger men or adolescent boys, surgeons may recommend a wait of about two years after the onset of gynaecomastia before surgery, as most cases in this age group will improve without surgery. The timing of surgery depends on:

- the size of the breasts
- whether or not the condition has stabilised
- sometimes, the degree of embarrassment.

REALISTIC EXPECTATIONS

Surgery for gynaecomastia can improve your appearance and lead to greater self-confidence, but it is important to have realistic expectations of what surgery will achieve. The final result may not necessarily match your ideal image. It is important to think about your expectations before you commence surgery, as the results may be permanent. However, if you have a realistic outlook, then you are likely to be satisfied with the surgery.

PREPARATION FOR SURGERY

On the day of your surgery, do not eat or drink for six hours before the operation. Before the surgery commences, your surgeon may map out areas on your chest wall to define the excess breast tissue and surgical sites.

Smoking: Smoking should be stopped at least two weeks before and after surgery because it can interfere greatly with healing and recovery. It is best to quit.

YOUR MEDICAL HISTORY

Your surgeon and anaesthetist need to know your complete medical history. Tell them about any health

concerns you may have had because some problems may interfere with the surgery, anaesthesia or recovery.

Tell your surgeon if you have or have had:

- an allergy or bad reaction to antibiotics, anaesthetic drugs, or any other medicines
- prolonged bleeding or excessive bruising when injured
- recent or long-term illness, and any previous surgery
- poor healing or excessive scarring after previous surgery.

Give your surgeon a list of ALL medicines you are taking or have recently taken. Include medicines prescribed by your family doctor and those bought "over the counter" without prescription, especially any hormone-type tablets such as herbal testosterone additives. Include long-term treatments such as blood thinners, aspirin (including that contained in cough syrups), arthritis medication or insulin.

Your doctor may ask you to stop taking some medications for a week or more before your procedure, or you may be given an alternative dose.

Tell your doctor about other medica-

tions or drugs you may be taking that have not been prescribed, such as marijuana or anabolic steroids.

ANAESTHESIA

Surgery for gynaecomastia can sometimes be performed with the patient under a local anaesthetic and sedative if the condition is minimal. A general anaesthetic is usually necessary if more extensive surgery is required. Modern anaesthesia is safe and effective, but does have risks. Your anaesthetist and surgeon can explain more about the anaesthesia that is best for you, as well as the benefits and risks.

COST OF TREATMENT

Surgery to treat gynaecomastia may not be covered by your private health fund, so it is important to check this. Ask your surgeon about all fees, including those for the anaesthetist, hospital and any other costs and out-of-pocket expenses. Subsequent treatment for any side effects or complications may or may not be covered by public or private health insurance. Discuss costs before treatment rather than afterwards.

SURGICAL METHODS FOR GYNAECOMASTIA

The surgical methods to treat gynaecomastia depend to some degree on the type of tissue present in the breast:

- mammary gland tissue requires surgical cutting
- fatty tissue can be removed using liposuction
- breast tissue composed of both glandular and fatty tissue requires a combination of surgical cutting and removal, liposuction and surgical revision of the breast shape.

Removal of glandular tissue: Mammary gland tissue may be present as separate small lumps attached to the nipple just under the areola (the coloured circle of skin just around the nipple), or it may spread out further into the fatty cells of the chest wall in a finger-like manner. For surgical removal of glandular tissue, a small cut is made at the lower edge of the areola and may be extended on to breast skin. The mammary glands, which are firm and contain no fat cells, are dissected away from the surrounding tissue with scissors and forceps, or cautery.

Liposuction: With this method, excess fat tissue is removed from the breast using suction. Liposuction alone may be used if the excess tissue is almost entirely fat. During this procedure, a slim, hollow tube called a cannula is attached to a vacuum line and inserted through one or more small incisions. The cannula is moved through the fatty tissue with firm strokes to break up the fat and suction it out. If performed under a local anaesthetic, the patient may feel vibrations or a tugging sensation as this is done, but generally it is not painful. Liposuction can also be used to even out the distribution of remaining fat and create a more normal appearance.

If mammary glands and fat cells are both present, surgical removal of the glands alone can sometimes result in a “defect” or crater-like space appearing on the surface of the chest wall after the surgery. Similarly, liposuction alone will leave the glandular tissue present, which will give the appearance of lumps on the chest wall. Surgical removal as well as liposuction may be necessary.

Once this has been done, the wound is closed in layers, generally using hidden or dissolvable stitches in the deeper layers.

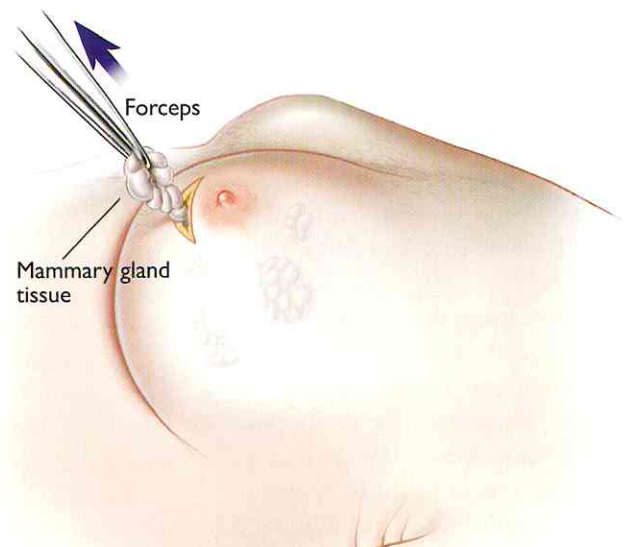
ADDITIONAL SURGICAL PROCEDURES

Removal of excess skin: In cases where a lot of breast tissue has been removed, the surrounding skin may not settle well into the new, smaller breast contour. If this occurs, excess skin on the chest wall may have to be removed to restore the appearance of a flat chest wall.

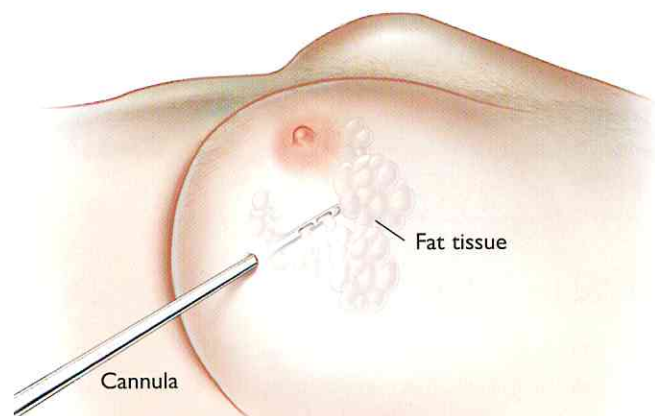
Injection of dilute local anaesthetic: Some surgeons use a technique of injecting large amounts of very dilute local anaesthetic fluid into the breast space before using the liposuction equipment. This helps to swell the space and usually results in less bruising and less discomfort after surgery. However, it can also obscure the area, making it a little more difficult to determine the extent of treatment needed.

Microliposuction: With this method, a very thin “micro-cannula” is used to suction out the fat tissue. Smaller amounts of tissue are taken out with each sweep, which can provide the surgeon with more control where needed.

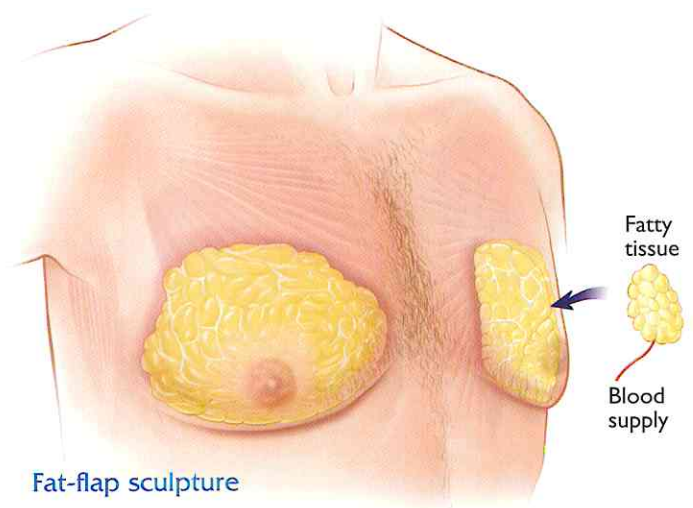
Fat-flap sculpture: This is a method that can be used if removal of the mammary glands has left a significant crater that cannot be filled easily by fat tissue. Fat-flap sculpture transfers a larger



Removal of glandular tissue



Liposuction



Fat-flap sculpture

piece of fatty tissue, which has its own blood supply, into the spaces created by the removal of the glands. Fat flaps with their own blood supply are more likely to survive when they are moved into position.

Nipple reduction surgery: This can be performed for men with large nipples that project above the areola. Standard treatment to remove breast tissue may be performed first and the breast allowed to recover. Then, if the nipples are still considered abnormally large, further surgery to reduce their size can be an option.

RECOVERY AFTER SURGERY

After surgery, you are transferred to a recovery room. Depending on the extent of the surgery, it is usually possible to go home a few hours after the procedure. Your surgeon and anaesthetist will advise you. You will need to be driven home.

Due to swelling, the breasts may look as though surgery has not reduced their size. Swelling can be treated with an elastic pressure garment worn continuously for a week or two, then at night for several more weeks. In the early stages, an ice pack applied for 20 to 30 minutes every few hours may help reduce swelling. Although most of the swelling and bruising subsides within a few weeks, three months or so may pass before the area has settled down to its final appearance.

A surgical dressing may cover the incisions. It can usually be removed the

day after discharge from hospital, depending on instructions from your surgeon. The area should be kept clean and dry. Avoid soaking in a bath or directing water at the incisions. A waterproof dressing may be provided.

A thin plastic tube may be placed in the operated area so excess fluid is drained away. Drainage tubes usually stay in for a few days.

Some pain and discomfort are usually present for a few days but can be controlled with painkillers, which must be taken as directed by your surgeon.

Driving is possible once the chest wall feels comfortable. This may be after 24 hours or up to a week later, depending on the extent of surgery.

Exercises are helpful, as muscle tone and shape are important for the appearance of the chest wall. However, do not start exercising until your surgeon has advised you.

If you are prescribed antibiotics, take

the complete course as your surgeon advises.

Your surgeon will advise you about a follow-up visit and whether stitches need to be removed. Time off work depends on your level of activity and should be discussed with your surgeon, but some people feel well enough to return to work in one or two days. It is usually safe to return once the chest wall feels comfortable. Heavy exercise should be avoided for about three weeks, and sexual activity should not be resumed for one to two weeks after the surgery.

Contact sports or activities that risk blows to the chest area should be avoided for six weeks.

Avoid direct sunlight and sunburn of the chest area for at least six months, as this may affect skin pigmentation and colour. If exposure to the sun is unavoidable, use a sunscreen with a skin protection factor (SPF) of at least 30.

POSSIBLE COMPLICATIONS OF SURGERY FOR GYNAECOMASTIA

As with all surgical procedures, surgery for gynaecomastia does have risks, despite the highest standards of practice. With this type of surgery, complications are infrequent and usually minor. While your surgeon makes every attempt to minimise risks, some may occur that have permanent effects.

It is not usual for a surgeon to outline every possible side effect or rare complication of a surgical procedure. However, it is important that you have enough information to fully weigh up the benefits, risks and limitations of surgery.

Any discussion of frequency of risks or benefits (for example, one patient in 100, or "rare" and so on) can only be estimates as the outcomes of clinical research can vary widely. Such outcomes can depend on many factors, such as the surgical methods, equipment, surgeons' experience and data collection, among others.

The following possible complications are listed to inform and not to alarm you. There may be other complications that are not listed. Smoking, obesity and other significant medical problems will cause greater risks of complications.

General risks of surgery

- Cardiovascular problems such as heart

attack, blood clots or stroke are uncommon and often depend on the patient's medical history and age. These complications are rare after surgery performed under local anaesthetic and sedation.

- Uncommonly, an infection of an incision may occur some days after surgery and require antibiotic treatment.
- Excessive bleeding.
- Rarely, an adverse reaction to anaesthetic.

Specific risks of surgery for gynaecomastia

- Slightly mismatched breasts or nipples. If this is a significant problem, a second surgical procedure may be needed to correct the imbalance in size or position.
- Numbness or loss of breast sensation is a temporary side effect and may last for up to a year.
- Recurrence of breast growth after surgery can occur if the breasts had not finished growing when the surgery was done. This is an important reason why it may be preferable to wait until growth has stabilised before having surgery.
- Permanent pigment changes in the breast area may occur.
- Another procedure may be needed to

remove excess skin if large amounts of mammary gland or fatty tissue have been removed and the overlying skin has not adjusted to the new breast size.

- A keloid scar and hypertrophic scar are surgical scars that become inflamed, raised and itchy. People with a history of developing these types of scars are more at risk. Keloids and hypertrophic scars can be annoying but are not a threat to health.

REPORT TO YOUR SURGEON

Notify your surgeon at once if you notice any of the following:

- increasing nausea or vomiting
- increasing chest wall pain
- persistent redness, pain, pus, swelling or bleeding around the incisions, or a fever more than 38°C or chills, which may indicate infection
- feeling dizzy, faint or short of breath
- pain in the leg or calf
- any other concerns about your surgery.

If you cannot contact the surgeon, go to your family doctor or Accident and Emergency at your nearest hospital.