

GYNAECOMASTIA



What is gynecomastia?

Gynecomastia is the enlargement of male breast tissue. It is a common, benign (not cancer) condition that mainly affects teenage boys and older men, but it can affect men at any age.

Even though gynecomastia is very common, it is not talked about much because some people, particularly boys, find it embarrassing. Gynecomastia can often make teenage boys feel very anxious and worry about what it means for them. Two out of three teenage boys develop some degree of gynecomastia, and 90% of cases get better by themselves.

Causes of gynecomastia?

Ageing

Puberty in boys usually starts once they reach their teenage years. However, some boys may notice changes when they're as young as 10. When puberty starts there's a rise in the levels of the hormones oestrogen and testosterone. Oestrogen stimulates the breast to grow and testosterone stops breast growth.

As well as the other changes associated with puberty, boys may notice that their breasts are tender or are growing. This is because during puberty, there will be times when there's more oestrogen than testosterone in the body, which causes breast tissue to change. If oestrogen levels continue to be higher than testosterone levels, the ducts and lobules will grow and the breast(s) will become larger and more noticeable.

By around the age of 15, testosterone levels start to settle at a constant higher level than oestrogen levels. This stops the oestrogen from having any further effect on the breast tissue. By the time a man is around 19, his breast or breasts have usually begun to shrink down and flatten out. Ageing As a person gets older, they tend to have more body fat, which produces oestrogen. In addition, as men get older they also produce less testosterone. The combination of an increase in oestrogen levels and reduced testosterone levels can cause the breasts to become larger. Weight gain in later life may be particularly noticeable in the breast area as well, resulting in larger breasts. This is known as pseudo-gynecomastia. Many men accept this change as another part of the ageing process

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Other causes

Drugs and medication

Some drugs (both prescription and illegal) can cause gynaecomastia. They may either contain oestrogen, which increases the level of the hormone circulating in the body, or have an oestrogen-like effect. This is the case with a drug such as cannabis. Some drugs block testosterone production altogether, reducing the level of circulating testosterone.

Several types of prescribed medication can change the hormone balance in the body. Medications taken for high blood pressure or heart conditions, some psychiatric conditions, stomach ulcers, some cancer therapies and some antibiotics, as well as drugs taken to build up muscles (anabolic steroids), can all be a cause of gynaecomastia.

Herbal products

Some herbal supplements and certain cosmetics contain oestrogen. This may increase the level of the hormone circulating in the body or have an oestrogen-like effect, on both children and adults. Once you stop using them, the effects stop and eventually the breast tissue will settle down.

Diet and weight

The more fat cells a person has in their body, the more oestrogen they produce. This in turn can make breast tissue grow. A well-balanced diet and exercise are important in maintaining a healthy weight.

Alcohol

Drinking too much alcohol has been shown to affect the liver in many ways and cause a number of conditions. Large quantities of alcohol stimulate the liver, creating a hormone imbalance. Circulating testosterone is reduced, but oestrogen levels rise (as the liver stops breaking down the circulating oestrogen). This means that breast tissue can grow.

Unkown reasons

Sometimes it's not possible to tell why a man develops gynaecomastia. However, the treatment options to correct it can be the same as when the cause is known.

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What are the symptoms of Gynecomastia?

The symptoms of gynaecomastia can vary from a small, firm enlargement of breast tissue just behind the nipple to a larger, more female-looking breast. Gynaecomastia can affect one or both breasts. The area can be tender to touch or painful.

True gynaecomastia (caused by an enlargement of breast tissue) is different from pseudo-gynaecomastia, which is an increase in fatty tissue. However, gynaecomastia can also be a mixture of both.

Breast development in boys Breast tissue develops while in the womb. During this time, the breasts form small branching tubes (ducts) behind the nipple. Until boys reach their teenage years and puberty, their breast tissue is the same as that of girls. However, when they reach puberty, increased hormone levels affect the further development of the breast tissue.

In girls, the hormone oestrogen causes the breasts to grow and milk-producing glands (lobules) to form at the end of the ducts, so a woman's breasts are able to carry milk to the nipple.

Boys also have higher levels of oestrogen during puberty, but by the end of their teenage years they usually have much higher levels of the hormone testosterone. This stops the effect of oestrogen on breast tissue, and the breast usually flattens out.

How is Gynecomastia diagnosed?

Clinical Breast examination by a Specialist & Ultrasound scan of both breasts are essential. Based upon this initial assessment, the Specialist may ask for a Mammogram (x ray of breasts) particularly if the gentleman is elderly and a needle biopsy (FNAC/Core needle biopsy)

Because gynaecomastia can be a symptom of other conditions, such as hyperthyroidism (overactive thyroid gland), the Specialist may also want to examine the neck, abdomen (belly) and testicles. Blood tests such as Liver function tests, Alfa Feto Protein and B HCG may need to be done.

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What is the treatment of Gynecomastia?

In most cases, reassurance is all that is needed. No specific treatment is advised. For some people, removing the cause of the Gynaecomastia (such as changing medication, reducing excess body fat or reducing alcohol intake) is all that is needed to shrink the extra breast tissue. Few people may need to have medical treatments (Danazol/Tamoxifen) for a short period of time, as decided by the Specialist.

In general, Surgery is only recommended if Gynaecomastia has not improved with lifestyle changes and/or medical treatments, or if it has been there for a long time and it is affecting your quality of life.

The Specialist should discuss any risks of surgery before undertaking surgery as an option because Surgery for gynaecomastia is not straightforward. The type of operation will depend on the size of the gynaecomastia and the amount of excess skin there is in the breast area. The aim is to restore a more normal male chest size, and sometimes this involves more than one operation.

Liposuction (a surgical procedure in which fat is removed from the affected area) is one of the most common procedures. It can be a treatment by itself or at the same time as a breast reduction operation (known as a reduction mammoplasty). A breast reduction can also be done without liposuction. Because all the above procedures leave some breast tissue, gynaecomastia could still return.



Conclusion

Gynaecomastia can be a distressing, embarrassing and isolating experience for anyone affected by it. Boys going through puberty and coping with other physical changes can find it particularly hard to discuss their growing or painful breasts with anyone. As a result, teenage boys often don't realise how common the condition is. Older men may worry that the changes to their breasts are a sign of cancer.

Having gynaecomastia does not increase risk of developing breast cancer. However, it's still important for men also to be 'breast aware' and report to a Specialist if any new changes in the breast are noticed.