

## GYNAECOMASTIA

### What is gynaecomastia?

'Gynaecomastia' is the medical term for a higher than normal amount of breast tissue in males. This excess tissue is glandular tissue and not just extra fat, therefore it cannot be reduced by weight loss or exercise.

Many men find gynaecomastia embarrassing, and seek medical help for this reason. Others find that the enlarged breast can be tender or painful, and this is often why men, who have had large breasts for some time, eventually consult their doctor.

In the vast majority of cases, gynaecomastia is a distressing condition, but, it is not an indication of serious or worrying disease. It might be a side-effect of medication, or may be due to a simple hormone imbalance (see below). However, although this is very rare, it can be more than just a cosmetic problem; it could be a sign of liver problems or lumps on the testes or adrenal glands. For this reason, any man who has excess breast tissue should always go to a doctor for advice.

Reports in the UK suggest that 4% of all men are affected to some degree. Recent studies in Australia have shown that this is an underestimate. One centre claims that as many as 1 in 3 men under the age of 40, and almost half of all men over 50, are affected.

### Causes of gynaecomastia

The male breast and the female breast are very similar in structure. The difference in breast size between men and women is caused by different hormones and not due to differences in the breast tissue itself. High concentration of oestrogens in women encourages their breast growth, whereas in men androgens stop the growth of the breasts.

Enlargement of the male breast is common during puberty, and this is perfectly normal. Hormone changes during adolescence may produce a temporary imbalance in the oestrogen-androgen ratio, causing the breasts to grow. In nearly all these teenagers, the breasts are only enlarged temporarily and settle down once hormone levels become more stable.

In adult men, the causes of breast growth can be more complicated, and it is less likely to resolve without treatment.

The commonest cause of gynaecomastia in adults is medication. Many drugs are associated with breast enlargement in men. Most of these are anti-ulcer drugs, such as cimetidine (Tagamet) and ranitidine (Zantac). Newer medications for peptic ulcer disease such as lansoprazole can also cause gynaecomastia. Breast growth can also be a side-effect of medication for heart disease, such as digoxin and spironolactone.

Some of the so-called 'recreational drugs' can also cause breast growth in men – particularly cannabis, anabolic steroids, alcohol and heroin.

In drug-induced gynaecomastia, stopping the drug may reduce breast tenderness, but often the excess breast tissue will persist for a long time.

Rarely, gynaecomastia is a symptom of disease elsewhere. Any disease causing a hormone imbalance may result in gynaecomastia, such as disorders of the thyroid gland or the adrenal glands. Liver disease and kidney failure can alter the way that the body metabolises oestrogen, and cause breast growth.

Gynaecomastia is also seen in rare genetic disorders, for example Klinefelter's syndrome. This condition affects one in 500 men, and is due to an extra 'X' chromosome (men normally have one X and one Y chromosome whereas men with Klinefelter's have two X and one Y.)

Very rarely, gynaecomastia is a sign of abnormal activity in the testes or in the adrenal gland. Testicular lumps reduce the amount of testosterone in the body, altering the hormone balance. Other testicular disorders such as infection (eg due to mumps) or loss of a testicle can also lead to gynaecomastia.

Finally, men as well as women may develop a cancer of the breast, though this occurs much less frequently in men than in women. One-sided breast enlargement might indicate cancer.

### **Treatment of gynaecomastia**

The treatment of gynaecomastia varies greatly between individuals, and is usually agreed after discussion between the doctor and patient.

Many men are initially worried and embarrassed by their symptoms, though once they have been reassured that there is nothing sinister or suspicious, they choose not to have any treatment.

However, for those who would prefer some form of therapy, two options are available - medicine or surgery.

For the majority of cases, surgery will provide the best result. Rather than doing a full 'open' operation to remove the excess tissue (a 'mastectomy'), many surgeons now use a less invasive approach and remove the excess tissue through a small hole in the skin. This 'subcutaneous mastectomy' results in less scarring.

For some men, medical treatment is effective and they will not need surgical removal of the breast tissue. Danazol is sometimes used. This drug has a mild androgenic action which adjusts a hormone imbalance in patients where hormone disorders are the cause of their condition. Danazol can, however, cause nausea, rashes, muscle pain, mood changes, headaches and weight gain.

## **Summary**

Excess breast tissue in men, or gynaecomastia is very common and is usually due to hormone changes in puberty or drug therapy in older men. Very rarely, breast enlargement is a sign of disease elsewhere, and so it is important that all men with breast growth seek a medical opinion to exclude a sinister cause. Effective treatments are available and your doctor will be happy to discuss with you which options are most suitable.