Pubertal Gynaecomastia (breast enlargement in boys at puberty)

What is a hormone?
Hormones are chemical messengers. They are made in glands and travel round the body in the bloodstream. Hormones affect how other organs in the body work.

What is pubertal gynaecomastia?
Gynaecomastia means enlargement of the breasts in boys. Some breast enlargement is common in boys while they are going through puberty. It is a normal part of growing up. However, some boys find this hard to deal with and can be upset and embarrassed.

Why does it happen?
When children grow up to become adults (puberty), the body makes sex hormones. Boys make testosterone in the testes and girls make oestrogen in the ovaries. However, both hormones are made in both sexes at different amounts. During puberty the balance between these two hormones can be upset.
Boys who are overweight are more likely to develop gynaecomastia, as cells that store fat can also make oestrogens.
Breast tissues are sensitive to oestrogen in boys (as it is in girls). Even small amounts of oestrogen can cause breast development.
Although for most boys gynaecomastia is part of normal puberty it is important to exclude some medical conditions that are known to cause this. These include Klinefelter syndrome (when boys are born with an extra X chromosome), an over active thyroid gland, kidney and liver failure. Some medicines, especially steroids can also cause this. Occasionally gynaecomastia can run in families.
Your son’s consultant will consider this in their assessment and will discuss this further with you if needed.

How does it affect the boy?
Soon after the boy starts to show signs of puberty, small, firm breast buds can develop right under the nipples. They can be quite tender. In some boys there is also fatty development around the nipples.
In some boys, one breast is more affected than the other; this has no special significance. If the breast development becomes obvious, a boy may find it embarrassing. He may only wear loose clothing and try to avoid being seen by others. Some refuse to go swimming or take part in other sporting activities that would mean changing or showering with others.
This can be very difficult for boys to cope with and they may need extra support to help deal with their worries and feelings of embarrassment.

How is it confirmed?
Gynaecomastia may not be easily noticeable. If the boy is overweight, it can sometimes be difficult to tell whether it is breast or fat tissue. In this case pressing the area around the nipple with thumb and forefinger may confirm a circle of rubbery or firm breast tissue. Your doctor will also need to examine the boy to see if puberty has started.
How often does it happen?
It occurs in nearly half of all adolescent boys.

How is it treated?
Pubertal gynaecomastia almost always goes away as puberty progresses – usually within two years.
If the breast development is because of fatty tissue, it is helpful to lose some weight. Many different medications, which affect the hormones, have been tried but none are both effective and safe.
For most boys all that is needed is reassurance that it is a normal part of puberty and that it will go away.
In a small number of boys, the breast tissues do not go away and the only effective treatment is surgery. This is only considered once growth and puberty have been completed.

Are there any long-term complications?
The most common problem is that it is a source of distress to the young person.
There are no long-term health problems associated with simple gynaecomastia. If your son is found to have any other medical conditions his consultant will discuss this with you.

Suggested sites for further information:
https://www.nhs.uk/chq/Pages/885.aspx
http://www.gosh.nhs.uk/medical-information/gynaecomastia
https://www.gpnotebook.co.uk/simplepage.cfm?ID=x20040720105255044290

This leaflet has been written by members of the BSPED & reviewed by the Clinical Committee. It is designed to give you some general information about your child’s condition and treatment. Your child’s doctor or specialist nurse will be able to answer any further questions you have about your child.

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