



Want to know more about

Growth problems & growth hormone treatment



Growth is an indicator of a child's overall health and poor growth may indicate an underlying condition.

Childhood growth is dependent on good health, adequate nutrition, family background (genetics) and normal hormone levels.

To help identify any growth problems, regular measurements are plotted on a growth chart. This should be done every 3-6 months until 2 years of age, and then every 6-12 months until they finish growing.

3 main phases of growth:

Birth to preschool years: There is rapid growth in the first few years of life, particularly in the first few months.



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Childhood: a slower growth rate than in infancy, approximately 5-7cm per year



Adolescence/puberty: rapid increase in height during puberty up to final adult height. Girls have a growth spurt before they have their first period (menarche), boys have a slightly later growth spurt during mid puberty.

What is short stature?

Short stature is when a child's height is below the 3rd percentile for both their age and sex when plotted on a growth chart. Up to 3 in every 100 children can be short. Some signs might include not changing clothing or shoe size over a 12-18 month period, or growth has slowed well behind the child's peers at school.

Diagnosis of a growth problem before growth has ceased means treatment can be given if required. Diagnosis of a growth problem before growth and puberty have ended means treatment can be given if required.

Familial short stature

is one of the commonest reasons in otherwise healthy children, meaning that if the child's parents are short, then it is more likely for the child to also be short.

Constitutional delay of growth and puberty

happens when growth and puberty occur later than expected. It is a common cause and may run in families but can be distressing for adolescents.

Intrauterine growth restriction (IUGR)

occurs when babies do not grow as expected in the womb. Many will catch up their growth over the first 2-3 years of life but a small number may not.

Common causes of short stature:

Genetic conditions

can also cause abnormal growth patterns and are associated with short stature. If there are other medical problems as well as short stature, your doctor may look for genetic causes.

Hormone disorders

are when there is a deficiency in the various chemical messengers (hormones) in the body. An underactive thyroid gland or deficiencies of hormones made by the pituitary gland, such as growth hormone, can occur. Growth hormone deficiency affects approx 1 in 5000 children.

Investigations

Regular height and weight measurements over a 6-12 month period will help determine your child's growth rate. Blood tests and an X-ray of the hand may be done to help assess your child's growth potential.

Treatment

In some cases no treatment is required, and your child may reach their genetic potential but a little later than other children. If there is a medical reason for your child being short, then treatment will depend on the cause.

Growth hormone may be available to some children who are short and growing slowly and meet government criteria for treatment.

Growth hormone can only be given by injection into the subcutaneous fat layer using a very small (4 or 5mm) needle. Most children tolerate injections well although younger children may need some planned distraction at the time of the injection.

Side effects of GH treatment

Like all medicines it may occasionally cause unwanted side effects. Your doctor will discuss growth hormone effectiveness, safety and side effects with you if treatment is being considered.

Disclaimer

This leaflet has been written by members of ANZSPED. It is designed to give you some general information about your child's condition and treatment. If you have any questions about your child's condition and treatment, it is best to speak to your child's doctor or specialist nurse.



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Remember

Regular measurements are the most useful indication of your child's growth.

