Growth hormone therapy

This information sheet should be read in conjunction with any information provided by the manufacturer.

This information sheet describes growth hormone therapy, how it is given and some of its possible side effects. Each person reacts differently to medicines so your child will not necessarily suffer every side effect mentioned. If you have any questions or concerns, please ask your doctor, nurse or pharmacist or telephone one of the contact numbers on this information sheet.

What is growth hormone therapy?

Growth hormone therapy started in the 1950s, using growth hormone collected from human cadavers. This was in limited supply and brought with it side effects that could not have been foreseen. However, in 1985, this human-derived growth hormone stopped being used and was replaced by genetically engineered growth hormone. This has fewer serious side effects and gives better results.

How is it given?

The aim of growth hormone therapy is to treat growth hormone deficiency by returning the child to the normal growth curve so reaching the height that would be expected taking into account parents' height and other factors. The dose of growth hormone will be calculated according to your child's weight so will change over time. This dose will balance the results expected against potential side effects.

Growth hormone therapy is given by injection under the skin (subcutaneously) in a daily dose. You will be taught how to give injections before going home. For more information, please see our information sheet *Subcutaneous injections*.

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What are the side effects?

Genetically engineered growth hormone has excellent results. However, there are some side effects, as with all medicines.

Type 2 diabetes – This is no more common in children with growth hormone deficiency than in the general population but seems to occur more frequently in children having growth hormone therapy. However, this tends to occur in children who are more likely to develop the condition anyway, such as those with close relatives with type 2 diabetes.

Idiopathic intracranial hypertension – This occasionally happens, causing symptoms such as headache and visual disturbances. It tends to improve when growth hormone therapy is stopped and then reintroduced gradually at a lower dose.

Slipped capital femoral epiphysis – A bone condition where the hip becomes unstable causing hip and knee pain. This is quite common in children having a growth spurt so may not be linked to the growth hormone therapy.

Increased risk of some cancers – This is very much a theoretical risk but is complicated by children with growth hormone deficiency possibly having other factors that increase this risk. In long-term follow up of patients who had growth hormone therapy many years ago, there was an increased risk of some cancers. These patients were receiving much higher doses of growth hormone than are given today, so we cannot assume that these results apply to children being treated today.

Useful numbers

Endocrinology Clinical Nurse Specialists – 020 7813 8214
Pharmacy department – 020 7829 8680
Pharmacy Medicines Information – 020 7829 8608

Notes

Compiled by the Endocrinology department in collaboration with the Child and Family Information Group

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www.goshfamilies.nhs.uk www.childrenfirst.nhs.uk

