

# Growth Hormone Therapy

**This leaflet explains more about what growth hormone is and what you need to know before starting treatment. If you have any further questions, please speak to a doctor or nurse caring for you.**

## What is growth hormone and why have I been prescribed it?

Your child is being given a drug called growth hormone (GH) to improve his/her growth. This is because your child is deficient in this hormone or has a condition that is likely to benefit from growth-promoting properties of this hormone.

## How do I take the medication / get a repeat prescription?

GH will be given as a daily subcutaneous injection (injection given under the skin, usually in the buttocks), preferably in the evening, just before bedtime.

Response to the treatment will be assessed by monitoring growth of your child and by blood tests. The dose alterations will be performed by the Paediatric Endocrinologist.

The initial prescription for GH is released from the hospital and, until you are told otherwise, please contact the hospital endocrine nurse specialist if further GH supply is needed. Once you have the GH cartridges and / or pen device at home, a nurse from the Home Care Service will visit you at home to teach you and your family how to administer the injections.

## Are there any side effects?

GH is genetically engineered and the therapy has a good safety profile. In general, side effects are uncommon. However you need to be aware of these rare side effects.

1. Soreness, redness or bruising in the area where GH is injected may happen which usually fades away. If it remains a persistent concern please discuss with our hospital endocrine nurse specialist or with the GH home care team. They will review the administration technique and ensure that it is correctly done. Sometimes this problem can be resolved by changing the injection device, site of injection, depth of needle insertion or the type of needle. Occasionally the GH brand needs to be changed if an allergy is suspected.
2. Rarely, GH therapy can be associated with persistent severe headache, vomiting and visual disturbances. This is thought to be due to raised pressure within the brain (benign idiopathic intracranial hypertension). If your child develops any of these symptoms contact us.
3. High blood glucose can be rarely found during GH treatment and the risk can be associated to a family history of diabetes mellitus and / or obesity in the child. If needed, weight control will be advised. Your child will have periodic blood tests to monitor the blood glucose.

4. If your child is on thyroxine replacement and GH therapy, the dose of thyroxine may need changing. We shall continue to monitor your child's thyroid function tests. All patients receiving GH therapy will have periodic blood tests to check thyroid function.
5. In very rare cases children with GH deficiency or with other hormonal dysfunctions develop a tendency to have slipped capital femoral epiphysis (the end of the thigh bone slips from cartilage). This can cause pain in the hip/knee and/or a limp. This is not directly caused by GH therapy but if your child already has an underlying predisposition to have a slipped capital femoral epiphysis, it could become evident during rapid growth.
6. If the patient has scoliosis (abnormal curvature of the spine to the left or the right side) or has a predisposition to develop scoliosis then the growth acceleration caused by GH can worsen scoliosis especially during puberty. Patients with scoliosis will be monitored.
7. Mild swelling of hands and feet with joint discomfort (arthralgia) can occur due to retention of fluid. Occasionally there may be pain in the muscles (myalgia). Tingling and numbness in the fingers may happen due to pressure on the nerves (Carpal Tunnel Syndrome). These are uncommon transient effects in children and are mainly seen in adult patients.
8. In patients with a predisposing condition to cancer, such as a strong family history of cancer particularly gastrointestinal malignancy, Bloom syndrome or Down's syndrome, GH should be used with caution, as it may also increase the risk of tumours. GH treatment of paediatric cancer survivors does not appear to increase the risk of recurrence or second tumours from the evidence available so far. In children without prior cancer or known risk factors for developing cancer, there is no known clinical association between GH therapy during childhood and neoplasia.
9. In patients with previous history of malignancy, GH should be discontinued if there is any evidence of progression or recurrence of the underlying tumour.
10. GH should be discontinued during acute critical illness due to complications from major surgeries, trauma or respiratory failure.

You should also tell us and your doctor if you notice any other potential side effects not mentioned here.

If your child develops any of the above-mentioned side effects or if you have any concerns, please contact your consultant via hospital switchboard.

## Contact us

You can contact the paediatric endocrine clinical nurse specialist on either 0787 659 7062 or 0778 685 6764 (Monday to Friday 8.30am to 4.30pm) if you have any questions about this.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.stgeorges.nhs.uk](http://www.stgeorges.nhs.uk)

## Additional services

### Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

**Tel:** 020 8725 2453 **Email:** [pals@stgeorges.nhs.uk](mailto:pals@stgeorges.nhs.uk)

### NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

**Web:** [www.nhs.uk](http://www.nhs.uk)

### NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

**Tel:** 111

### AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website ([www.accessable.co.uk](http://www.accessable.co.uk)). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



**Reference:** DIB\_GHT\_01 **Published:** June 2021 **Review date:** June 2023