

# Glucagon test

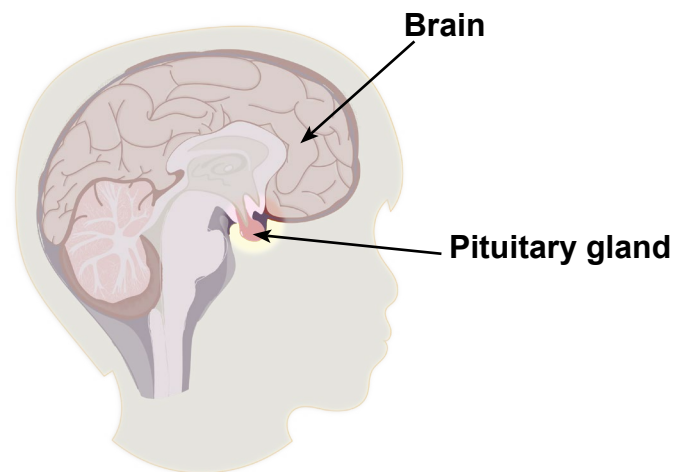
## Information for parents, guardians, and carers

You have been given this leaflet as there have been concerns regarding your child's growth and a Glucagon test is planned. If after reading this leaflet you have any further questions, please contact Dolphin Ward on 01227 86 40 52.

### What is a Glucagon test?

A Glucagon test is a way of assessing growth hormone produced by the pituitary gland.

The pituitary gland is a small pea-sized gland at the base of the brain. The pituitary gland produces several hormones important for growth, puberty, and well-being.



### What is growth hormone?

Growth hormone is a hormone produced by the pituitary gland that is needed for a child to grow normally. When it is released from the pituitary gland into the bloodstream, it travels to the body's tissues stimulating growth.

Growth hormone levels vary during the day, so a single blood test cannot be used to check if your child is producing enough of it. We therefore use a stimulation test, where glucagon is used to stimulate your child's pituitary gland to release growth hormone. We then measure the response over a three hour period.

### What happens if we decide not to have the test?

Without the test we can only monitor your child's growth in clinic and check the IgF1 (the indirect marker of growth hormone), and this is not so accurate. The Glucagon test is needed to diagnose growth hormone deficiency and is needed before growth hormone treatment can be prescribed.



## Are there alternatives to this test for accurately assessing the levels of growth hormone ?

No.

### What happens before my child's test?

- Your child will be given an appointment to come to Dolphin Ward for their test.
- **It is important to talk to your child about their test, explaining everything as simply as possible.**
- Children over the age of 10 years may be asked to take a medication twice a day for 48 hours before their test. If your child needs to take this medication, this will be discussed with you in clinic when the test is ordered.
- Children should fast before a Glucagon test. This means that they **should not** have anything to eat or drink (except water) from midnight the night before their test. During the test they will only be able to drink water.

### What happens on the day of their test?

- Please report to the reception desk in the Children's Assessment Centre at Kent and Canterbury Hospital.
- A nurse will greet you and your child, and take you both through to Dolphin Ward for your child's test. Please use this time to ask any last minute questions. Remember that you can withdraw your consent for treatment at any time, should you change your mind and wish to do so.
- Your child will have a bed on the ward for the duration of their stay.
- Anaesthetic cream will be applied to numb the area, before a nurse inserts a cannula into a vein. A tiny plastic tube remains in the vein and the cannula acts as a "tap", so blood can be taken repeatedly without having to keep inserting needles to collect it.
- The glucagon is then given as an intra muscular injection into your child's thigh.
- Blood samples are then taken every 30 minutes for three hours via the cannula.
- Your child's blood glucose levels are monitored throughout their test.
- Your child is advised to sit on their bed but is able to do activities such as crafts, playing, using electronic devices (such as tablets and smart phones), or watching TV. Bringing things with you to help entertain your child would be helpful.

## Are there any side effects to having a Glucagon test?

- Your child may feel slightly uncomfortable during the test and frustrated at having to sit still. They will be able to use the toilet as normal during the test.
- Blood glucose levels can drop and can cause your child to feel a little sick. Their blood glucose is monitored throughout the test, and very occasionally the test has to be stopped and the child given a dose of glucose. However this is rare.

## What happens after their test?

- Once the test is completed your child will be offered food and drink. They will need to stay on the ward for an hour after eating to make sure that their blood glucose is at a good level before leaving hospital.
- In the very rare event that their blood glucose level is slightly low, their discharge from hospital may be delayed and we will continue to monitor them.
- We suggest that you give your child a high carbohydrate meal at tea time, such as pasta, rice, bread, or potatoes to replace their energy stores.

## How long will it be until the results are available?

Results can take six to eight weeks. Generally results are given at your child's next outpatient appointment, or by letter or phone call.

## Contact details

If you are unable to come to your appointment or you have any questions or concerns about the test, please contact Dolphin ward on 01227 86 40 52.

**This leaflet has been produced with and for patients**

If you would like this information in **another language, audio, Braille, Easy Read, or large print** please ask a member of staff. You can ask someone to contact us on your behalf.

**Any complaints, comments, concerns, or compliments** please speak to your doctor or nurse, or contact the Patient Advice and Liaison Service (PALS) on 01227 78 31 45, or email [ekh-tr.pals@nhs.net](mailto:ekh-tr.pals@nhs.net)

**Patients should not bring in large sums of money or valuables into hospital.** Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property had been handed in to Trust staff for safe-keeping.

**Further patient leaflets** are available via the East Kent Hospitals web site [www.ekhuft.nhs.uk/patientinformation](http://www.ekhuft.nhs.uk/patientinformation)