

Growth hormone day curve

Information for patients

This leaflet answers some of the questions you may have about having a growth hormone day curve. It explains the purpose of the test and what you can expect when you come to hospital. If you have any other questions or concerns, please speak to the doctors or nurses caring for you.

What is a growth hormone day curve?

This test is done to measure the level of growth hormone (GH) in your blood. Your blood is tested at regular intervals to give an indication of growth hormone production over a short period of time.

Why do I need this test?

Growth hormone is produced by the pituitary gland and is needed in childhood to regulate metabolism and promote growth. Growth hormone is produced in adulthood to maintain bone and muscle mass. Growth hormone also affects body fat levels, energy levels, memory and general wellbeing.

This test allows us to measure your growth hormone level and find out if the levels measured are within a normal range. It is important to take several samples as growth hormone production fluctuates over time.

This test is routinely used in those with suspected or known growth hormone excess, known as acromegaly.

What are the benefits?

This test can be used to rule out or diagnose acromegaly so the endocrine team can decide if treatment is required. In those with diagnosed acromegaly this test is used to assess if the current treatment for acromegaly is working.

What are the risks?

A cannula (tiny plastic tube) will be inserted into a vein in your arm or hand using a needle.

The cannulation process is similar to that of a blood test. Associated risks with cannulation or a blood test may include:

- multiple punctures to locate veins
- bleeding from puncture site

- bruising
- haematoma (blood build up under the skin)
- fainting or feeling lightheaded
- infection (a slight risk any time the skin is broken)
- phlebitis (inflammation of the vein)

Keeping pressure on the puncture site for a few minutes after the needle is removed will help to reduce bruising.

Are there any alternatives?

There are no alternatives to this test.

Do I need to prepare for my test?

You do not need to prepare for this test. You may eat and drink normally. You may take your regular medication unless specifically instructed otherwise.

What happens before my test?

Your blood pressure will be taken and the nurse will ask you about your regular medications.

What happens during my test?

A cannula (tiny plastic tube) will be inserted into a vein in your arm or hand using a needle from which blood samples will be taken for the duration of the test.

A growth hormone level will be taken when the cannula is inserted and then every 30 minutes for a two hour period. This is five blood samples in total.

How long does the test take?

The test lasts for two hours. You should expect to be in the unit for two and a half hours.

What happens after my test ?

Once the test has been completed the cannula will be taken out and you will be able to go home.

Results will be reviewed by the endocrine team. They will either be sent to you by letter or, in some cases, discussed on the phone or with you at your next clinic appointment. We will also send a letter to your GP. This may take up to six weeks.

Contact

If you have any queries or concerns please contact the Programmed Investigation Unit (PIU).

Tel: 020 3299 3034 or 020 3299 1385. Opening hours: 8am to 6pm, Monday to Friday.

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is located on the ground floor of the Hambleton Wing, near the main entrance on Bessemer Road - staff will be happy to direct you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at **www.kch.nhs.uk/contact/pals**

If you would like the information in this leaflet in a different language or format, please contact PALS on **020 3299 1844**.