

Patient information factsheet

Two-hour glucose tolerance test to measure growth hormone excess (Acromegaly)

Your doctor has recommended that you have a glucose tolerance test. This factsheet aims to answer some of the initial questions you may have about what's involved. If you have further concerns or would like more information, please speak to your health-care team.

What does the test involve?

The test involves having your blood tested over a two-hour period, in order to measure how your blood sugar and growth hormone levels react to a set amount of sugar (glucose).

Growth hormone is produced by the pituitary gland and helps with growth and repair. The pituitary gland is a small, pea-sized gland located below the brain, behind the bridge of the nose. It produces many of the body's hormones (chemical substances that help control and regulate processes in the body). As children we produce large quantities of growth hormone to grow, but as adults we require smaller amounts for wellbeing.

Levels of growth hormone are normally low following sugar (glucose) intake, but if growth hormone levels are high, it would suggest excess growth hormone production – a condition called acromegaly which is usually caused by a benign (non-cancerous) lump within the pituitary gland.

The test will last for around two to three hours. You will be required to stay at the hospital during this time in order to give regular blood samples.

Before your test

- You must not eat or drink anything apart from water from midnight before the test.
- Bring something to read or listen to as there will be periods of waiting between blood tests.
- The test will be carried out by an endocrine nurse specialist who will be able to answer any questions you may have.

If you have diabetes please contact the endocrine nurse before the test by telephone or email using the contact details over the page.

During the test

- A small needle called a cannula will be inserted into a vein in your arm or hand. This allows your nurse to take blood samples directly without further use of needles.
- A blood sample for growth hormone and glucose (sugar) will be taken. We will then give you a sugary drink.

Patient information factsheet

- Further blood samples will then be taken at 30 minute intervals for the next two hours.

Side effects

You shouldn't experience any side effects other than feelings of hunger from fasting.

After the test

When the test has finished, your cannula will be removed and we will give you something to eat and drink before you go home.

Results

Results will either be sent to you by letter/a phone call or discussed with you at your next clinic appointment. We will also send a letter to your GP. This could take up to three weeks.

Further information

Please contact the endocrine nurse specialist if you require more information or if there is anything you do not understand.

Contact the endocrine nurse specialist:

Telephone: **023 8120 4710**, Monday to Friday 8.30am to 4pm (answer phone service out-of-hours or if the nurse specialist is unavailable).

Email: endocrinenurse@uhs.nhs.uk

Useful links

NHS Choices

www.nhs.uk/conditions/acromegaly/Pages/Introduction.aspx

The Pituitary Foundation

www.pituitary.org.uk/information/pituitary-conditions/acromegaly/

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Version 3. Reviewed March 2023. Due for review March 2026. 735.