Glucagon Stimulation Test

Your doctor has recommended that you have a Glucagon Stimulation Test.

The aim of this leaflet is to provide you with information about the test so that you understand why it is being done and what to expect.

St Helens Hospital Marshall Cross Road, St Helens, Merseyside, WA9 3DA Telephone: 01744 26633





Glucagon Stimulation Test

This leaflet can be made available in alternative languages / formats on request.

如有需要,本传单可提供其他语言/版式 此單張的其他語言/格式版本可按要求提供

Na żądanie ta ulotka może zostać udostępniona w innych językach/formatach.

Author: Endocrine Consultant
Department: Diabetes and Endocrine
Document Number: STHK1247

Version: 1.1

Review Date: 01 / 12 / 2024

Why do I need to have this test?

The purpose of this test is to ensure that your body is producing enough cortisol and growth hormone. Cortisol and growth hormone production is controlled by the pituitary gland.

Cortisol (your body's natural steroid) is vital in helping your body respond to stress and illness. Growth hormone in adults is important in maintaining bone and muscle mass as well as affecting body fat distribution.

A one-off blood test for cortisol is often not enough to be certain that the cortisol and growth hormone levels and a 'stimulation test' is sometimes required.

Do I need to stop any medication?

The Oral Contraceptive Pill (OCP) and Hormone Replacement Therapy (HRT) can interfere with the results and may need to be stopped up to 6 weeks before the test.

If you do stop the OCP another form of contraception should be used.

Your Endocrinologist should tell you if you need to stop any medication and when to restart it.

What does the test involve?

You need to fast from midnight before the test, you can drink plain water. Bring all your medication with you. You will need to attend the hospital for around four hours for this test. The nurse will explain the test, place a cannula (a small tube for blood samples) into a vein and take an initial sample for cortisol and growth hormone levels.

You will then have an intramuscular injection (usually the upper arm or thigh) of 1 mg 'Glucagon'. This causes a rise in your blood sugar, which stimulates insulin production, which will stress your body and should stimulate cortisol and growth hormone production. You will have further blood tests for cortisol and growth hormone at 90, 120, 150, 180, and 210 minutes. The cannula will then be removed and you can go home.

How will I find out the results?

Your Endocrinologist will write to your GP with the results of the test. A copy of this letter will usually be sent to you also.

What if I need advice?

We have a secure confidential answer machine available and email service for patients requiring advice from the Endocrinology Specialist Nurse.

Messages will be assessed and returned in priority order.

The Endocrinology Specialist Nurse may be unavailable at times, so please leave a short message including your full name, hospital number or date of birth and contact number.

They will contact you as soon as possible, however this may be the next working day.

If your enquiry is a medical emergency, please contact your own GP, NHS 111, dial 999 or attend your local Accident and Emergency Department.

Further information?

You can contact the Endocrinology Specialist Nurse with any questions you may have.

If your enquiry is for the Endocrinology Medical Team, please contact their secretaries through the hospital switchboard 01744 266 33.

Endocrinology Specialist Nurse

Tel: 07881 928197

Email: endocrinology.nurse@sthk.nhs.uk