Introduction

Octreotide challenge

Information for patients

This leaflet answers some of the questions you may have about having an octreotide challenge. It explains the purpose of the test and the side effects you may have during the test. This leaflet also explains 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 an octreotide challenge?

An octreotide challenge is a test used in patients with confirmed acromegaly (an excess of growth hormone) to predict whether treatment with somatostatin analogues will be effective.

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. It also affects body fat levels, energy levels, memory and general wellbeing.

An excess of growth hormone is known as acromegaly. Acromegaly can result in several signs and symptoms that vary from person to person. These can include enlarged hands and feet, coarsened enlarged facial features, headaches, a deepened voice, oily thickened skin and fatigue or muscle weakness.

A group of medications, called somatostatin analogues, can be used to treat acromegaly. This treatment aims to normalise your growth hormone levels. Octreotide is a somatostatin analogue. The octreotide challenge test is necessary to determine if treatment with somatostatin analogues will be effective for you.

What are the benefits?

This test allows us to determine if somatostatin analogues would be an effective therapy for your acromegaly treatment.

What are the risks?

At the beginning of this test the nurse will give you octreotide as an injection into the skin, on your abdomen (tummy).

Common risks associated with octreotide include:
• pain at the injection site
• constipation or diarrhoea
• feeling bloated
• stomach cramps
• excess wind
• loss of appetite

The dose of octreotide given during this test is very low so you are unlikely to get these side effects.

In extremely rare cases you may have dizziness, nausea (feeling sick), vomiting, irregular heartbeat, tiredness, skin reactions or difficulty breathing. If you have any of these side effects, we would seek the appropriate medical attention.

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

Consent

We must by law obtain your written consent to any operation and some other procedures beforehand. Staff will explain the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure of any aspect of the treatment proposed, please do not hesitate to speak with a senior member of the staff again.

Do I need to prepare for my test?

You do not need to prepare for this test. You may eat and drink normally. You can continue to take your regular prescribed medications.

What happens before my test?

Your blood pressure will be taken and the nurse will ask you about your regular medications. A consent form will be completed and you will be asked to sign this.

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. Growth hormone will be measured at this time.
The nurse will then give the octreotide as an injection into the skin, on your abdomen (tummy). Somatostatin analogue treatment can cause constipation or diarrhoea, feeling bloated, excess wind, stomach cramps or loss of appetite. A low dose of octreotide is given for this test so it is unlikely that you will get these symptoms.

A blood sample will then be taken to measure growth hormone every two hours for six hours. This is four blood samples in total.

**How long does the test take?**

The test lasts for six hours from the time the nurse gives you the octreotide injection. You should expect to be in the unit for 6 to 7 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 and, 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 Hambleden 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](http://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.