Hydrocortisone day curve

Information for patients

This leaflet answers some of the questions you may have about having a hydrocortisone 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.

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you don’t have an ID band we will also ask you to confirm your address.

If we don’t ask these questions, then please ask us to check. Ensuring your safety is our primary concern.
What is a hydrocortisone day curve?
A hydrocortisone day curve is used to measure the amount of cortisol in your blood stream. By measuring your blood cortisol levels at regular intervals we are able to assess your cortisol replacement throughout the day.

Why do I need this test?
The adrenal glands are situated on top of both kidneys and are responsible for producing cortisol. Cortisol is a hormone which is essential for health and which is particularly important in stressful situations. The adrenal glands produce cortisol in response to adrenocorticotrophic hormone (ACTH), a hormone produced by the pituitary gland.

Hydrocortisone is a medication used to treat those with low levels of cortisol. A hydrocortisone day curve will allow us to find out if you are taking the right dose of hydrocortisone. We need several samples over a period of six hours to make a decision.

What are the benefits?
your hydrocortisone requirements may change over time due to many factors. It is important to receive the right dose, as being under or over replaced can affect how well you feel and may have long-term implications. Therefore, it is important to monitor your current hydrocortisone dose(s) with a hydrocortisone day curve.

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 may eat and drink normally prior to the test.

Please continue to take your hydrocortisone tablets as prescribed. Please record the time at which you took your tablets on the day of the test. Please bring your tablets with you on the day of the test.

You can continue to take your other regular prescribed medications.

**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 cortisol level will be taken when the cannula is inserted and then every hour for a six hour period. This is seven blood samples in total.

**How long does the test take?**
The test lasts for six hours. You should expect to be in the unit for six 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 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

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