

Hydrocortisone day curve

What is Hydrocortisone Day Curve?

Hydrocortisone day curve is being done to measure the cortisol levels in your blood throughout the day.

Why would I need this procedure?

Cortisol is an important naturally occurring steroid hormone which allows your body to respond to stress and illness. It also plays a role in regulating your immune system, blood pressure and sugar levels. Cortisol production is controlled by the pituitary gland, a small pea sized structure at the base of the brain which sends a chemical message to your adrenal glands which sit just above the kidneys. A problem with the pituitary or the adrenal gland can mean not enough cortisol is produced.

As your body does not produce enough cortisol you are taking replacement hydrocortisone in tablet form.

This test is to make sure that you are taking enough hydrocortisone at the right time for your needs.

What are the symptoms that have led to me having this procedure?

You may still feel tired, low mood, low energy despite taking your usual dose of hydrocortisone replacement.

What are the alternatives?

There are no alternative tests which show your level of replacement at different times of the day.

What are the potential risks and side effects?

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

What are the expected benefits of having the test?

This test will help your doctor find out if you are taking the right amount of hydrocortisone throughout the day and facilitate necessary adjustments on your hydrocortisone dose.

Preparation for your test

You do not need to fast for this test (unless indicated on your appointment letter). You should take your medications as normal on the day of the test (unless advised not to do so). If in doubt, please phone your endocrine specialist nurse on the number below. Please bring any medications you will need for the day with you.

If you have been unwell and have increased your usual dose of hydrocortisone in the week before your appointment, please contact your specialist endocrine nurse on the number below before your visit.

What happens during the test?

It is important that you arrive for your appointment time as stated in your appointment letter. Your test will take most of the day (Approximately 8am – 6pm), depending on your daily hydrocortisone dose timing routine.

You will have blood taken 1 hour after you take your morning dose of hydrocortisone. The exact timing will be discussed with you before your test begins.

A cannula (a small thin tube) will be inserted into a vein in your hand or arm, so your nurse does not need to keep using a needle every time a blood test is required.

You may wish to bring a book or magazine to read. You may eat and drink as normal on the day of the test and it is advisable to bring lunch with you. You may leave the endocrine unit between your blood tests provided you return in time for your next scheduled blood test.

Will I have an anaesthetic?

No

How will I feel afterwards?

This test should not affect your normal activities of daily living.

How long will I be in hospital?

You will be in the hospital for approximately 10 hours.

What should I do when I go home?

In most cases, patients resume their normal activities.

How soon will I be able to resume normal activities?

In most cases, this test should not affect your normal activities.

Will I have to come back to hospital?

Depending on the test results, further tests may be required.

When can I return to work?

There are no work restrictions involved for this test as in most cases, patients resume their normal activities after the test

Consent

Although you consent for this test, you may at any time withdraw such consent. Please discuss this with your endocrine team.

Sources of information

For queries concerning this leaflet or your procedure please contact:

Endocrine Team at ESHT

Telephone: 0300 131 5910 - EDGH and CQ

Opening Hours: 8am – 4pm (Monday – Friday except Bank Holidays)

Important information

This patient information is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4434 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

Reference

The following clinicians have been consulted and agreed this patient information:

Consultant Endocrinologists (ESHT):

Dr David Till, Dr Umesh Dashora, Dr P. Sathis Kumar, Dr Ashref Bdiri, Dr. Koshy Jacob,
Dr Shakeel Ahmad, Dr Sadekh Elrokh

Biochemistry Consultants (ESHT):

Dr Yvette Lolin, Dr Hagosa Abraha, Dr Abd Al Hasan, Dr Indra Ramasamy

Endocrine Specialist Nursing Team (ESHT):

Mrs Maria Ravelo (Senior Endocrine Specialist Nurse)

Miss Angel Johnson (Endocrine Specialist Nurse)

Mrs Debby Gordon (Endocrine Assistant Practitioner)

The Endocrinology Department has agreed this patient information leaflet.

Next review date: February 2025

Responsible clinician/authors: Mrs Maria Ravelo (Senior ESN)
Mr Aldons Chua (TWS ESN)

© East Sussex Healthcare NHS Trust – www.esht.nhs.uk