

Testing the adrenal glands for cortisol production (short synacthen test)

This test is to see if your adrenal glands are producing the right amount of the hormone cortisol.

The adrenal glands

The adrenal glands are located in the abdomen, one lying above each kidney. The adrenals produce a number of hormones, including cortisol.

Cortisol

Cortisol is one of the body's many steroid hormones. One of its most important functions is to help the body cope with stresses such as illness, infection, surgery and trauma. It is also involved in the metabolism of fats, carbohydrates and protein.

Patients with suspected or confirmed low cortisol levels may be asked to have the synacthen test to establish if the adrenals are working normally by stimulating them with synacthen.

What is synacthen?

One of the hormones produced by the pituitary gland is called ACTH. It stimulates the adrenal glands to produce cortisol. Synacthen is synthetic ACTH.

Short synacthen test

This test involves injecting synacthen into a muscle, and measuring cortisol levels for an hour following the injection. Cortisol levels should rise above certain levels in response to the synacthen injection.

Preparation

You will be here for 1 1/2 hours.

You can eat and drink normally before the test.

Please advise the nurse of any medication that you are taking when you book the test.

Procedure

Please come into the unit (12th floor, Cockayne ward) by 09 00am.

As more than one sample of blood is taken during the test, a cannula (small plastic tube) is left in a vein in your arm to enable nurses to take repeated samples painlessly.

Having a cannula inserted feels similar to giving a routine blood specimen. Once in place, you should not feel the cannula.

After the first sample of blood is taken, you will be given an injection of synacthen - this is usually given into a muscle in your buttock.

Blood samples are then taken half an hour and one hour after the injection.

Side effects

Side effects from synacthen injection are rare, but in common with any other drugs, an allergic reaction with skin irritation, swelling, faintness, wheezing or flushing can occur.

General advice

- You should feel no after-effects from the test and be fit to return home afterwards.
- You will receive the test results at your next out-patient appointment.