

## PATIENT INFORMATION

# Synacthen Test

**What is Synacthen?**

ACTH is a hormone made by the pituitary gland. It gives a signal to the adrenal gland to make Cortisol. This test uses synacthen, a synthetic form of ACTH, to check if the adrenal gland makes the right amount of Cortisol and other hormones.

**What is a short synacthen test?**

It is a test to check the amount of cortisol produced in your body and to check how well your body can produce cortisol. Cortisol is one of the essential steroid hormones to keep you healthy. You can be unwell if this hormone is too low or too high.

**What do I need to do before the test?**

If your child is on prednisolone, a plan should have been made to change medication to hydrocortisone for the three days preceding the test.

If your child is on hydrocortisone please omit the morning dose until after the test has been completed.

Your child can eat and drink normally before the test. Please attend Short Stay paediatric assessment unit on Level 7, Elizabeth Ward at the time on admission letter. Your child should be free to go home after lunch.

**How do we do the synacthen test?**

A small needle/plastic tube (a cannula) is inserted into a vein in your child's hand or arm and left in place for the duration of the test. This allows blood samples to be taken from the cannula without causing any further discomfort. Often a local anaesthetic cream is put on the hand/arm an hour before the cannula is inserted to make it less painful.

A blood sample will be taken at the start of test to check your level of cortisol (baseline sample) following which an intravenous injection of synacthen is given. This stimulates the adrenal glands to produce cortisol.

Two further blood samples are taken 30 minutes and 60 minutes later to monitor the cortisol rise. All blood samples and the injection are through the cannula.

### **After the test is completed**

At the end of the test, the cannula is removed and refreshments offered. If you take steroid medication and have omitted a dose for the test it can be taken at this time. You will receive the results of the test by letter or at your next clinic appointment

### **Glossary**

**Adrenal gland:** The adrenal glands are small structures attached to the top of each kidney. The human body has two adrenal glands that release hormones, including cortisol, into the bloodstream.

**Cortisol:** Cortisol is a steroid hormone which regulates a wide range of processes throughout the body including metabolism and the immune response.

**Hormones:** Chemical Messengers or that carry messages from one cell to another via the blood stream.

**Pituitary gland:** The pituitary gland is a small pea-sized gland sited in the brain that plays a major role in regulating vital body functions. This 'master gland' controls the activity of most other hormone-secreting glands.

### **For more information contact:**

Short Stay Paediatric Assessment Unit Telephone: 01803 655492  
Monday to Friday 8.30am to 9.00pm

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For further assistance or to receive this information in a different format, please contact the department which created this leaflet.