Saline suppression test

Your doctor has recommended that you have a saline suppression test. This factsheet aims to answer some of the initial questions you may have about what’s involved. If you have further concerns or would like more information, please speak to your healthcare team.

What is a saline suppression test?
It’s a test which measures your levels of a hormone called aldosterone. (Hormones are chemical substances that help control and regulate processes in the body).

The test is used to diagnose a condition called primary hyperaldosteronism (also known as Conn’s syndrome) which causes the body to produce increased amounts of aldosterone, leading to high blood pressure.

The test involves you being given a solution containing saline (salt water) into a vein. This is known as an infusion. Your blood will then be tested to see how your body reacts.

Is there anyone who shouldn’t have this test?
This test isn’t suitable for people with uncontrolled heart failure or kidney failure. If either of these apply to you, or you have any questions or concerns, contact the endocrine nurse specialist using the contact details over the page.

Before your test
Some medication can affect the test, so if you’re taking any of the medicines below, please inform the endocrine nurse by telephone or email at least three weeks before your appointment:

- heart tablets (including those for angina)
- blood pressure tablets
- water tablets (diuretics)

It’s important that the level of potassium in your blood is normal before the test, so you may be asked to have this checked via a blood test before your appointment. If it’s low, you will be prescribed potassium tablets.

You can eat and drink as normal on the day of the test.

The test will last for around five hours. You will be required to stay at the hospital during this time, so that blood samples can be taken while the saline (salt water) is given. Please bring something to read or listen to while you are waiting.

The test will be carried out by an endocrine nurse specialist who will be able to answer any questions you may have.
During the test
A small plastic tube called a cannula will be inserted into a vein in your arm or hand and a blood sample will be taken. This allows your nurse to take your blood samples directly, without further use of needles. You will then receive an infusion of saline that will last for four hours. During this time you will be required to lie down. You may feel the need to pass urine as we infuse two litres of fluid into you. You will be allowed to go to the toilet.

At the end of this infusion a further blood sample will be taken. After this you will be able to move around. Food and drink will be provided during the day.

After the test
When the test has finished, your cannula will be removed and you will be able to go home.

Results
Results will either be sent to you by letter/a phone call or discussed with you at your next clinic appointment. We will also send a letter to your GP.

Further information
Please contact the endocrine nurse specialist if you require more information or if there is anything you do not understand. Please note however this is not to discuss diagnosis. If you have a query about your diagnosis, talk to your doctor at your next clinic appointment.

Contact the endocrine nurse specialist:
Telephone: 023 8120 4710, Monday to Friday 8.30am to 4pm (answer phone service out-of-hours or if the nurse specialist is unavailable).

Email: endocrinenurse@uhs.nhs.uk

If you need a translation of this document, an interpreter or a version in large print, Braille or on audiotape, please telephone 023 8120 4688 for help.