Water deprivation test

Department of Endocrinology
Your doctor has recommended that you take this test to help with the diagnosis and the management of your condition. Please would you read this carefully and ask us about anything that is not clear or if you would like more information.

**What is the purpose of the test?**

The purpose of this test is to work out why you are feeling thirsty and / or passing a lot of urine. We use this test to see whether you might have a condition called ‘Diabetes Insipidus’. This is a disorder in which your kidneys are unable to retain water, so you produce large volumes of urine which makes you feel very thirsty. This may be caused by a problem with the pituitary gland (a small gland beneath the brain) or the kidneys.

**How long will the test take?**

The test can last eight hours. The length of time will depend on the results of the tests we shall take on your blood and urine during the day. If we discover early on that you do not have diabetes insipidus, then the test will not take too long.

**Who will carry out the test?**

The test will be carried out by a specialist nurse or by a phlebotomist (someone trained to take blood). He/she will discuss the results with a doctor.

**What will I have to do?**

Your Endocrinologist will usually have advised you about preparations for the test in advance. This should include advice about whether or not you should take your regular tablets and medicines on the morning of the test. You may be asked to have nothing to eat or drink from midnight the night before the test (so the test will not last so long), or you may be allowed a light
breakfast. If you have not been given this information or have forgotten, please contact the endocrine specialist nurse.

**Is any drug or medicine used during this test?**

Depending on the results of your blood and urine tests during the day, you may be given an injection of DDAVP. This is a natural hormone (chemical signal) produced by the pituitary gland which makes the kidneys produce more concentrated urine.

**What will happen during the test?**

We will weigh you and ask you to give a urine sample. The nurse or phlebotomist will use a needle to insert a small plastic tube into a vein in your arm. This will be used to take regular blood samples without the need for more needles. You will not be allowed to eat or drink during the test. Every few hours, when you pass urine, we will check your weight again and take another blood sample. We will measure the amount of urine that you pass. It is very important that you do not drink anything during the test, even if you feel very thirsty, as this makes it very hard for us to interpret the results.

**What are the possible risks or side effects of the test?**

You may feel very thirsty. The nurse or a doctor will monitor your weight, blood and urine results carefully throughout the test to ensure that you do not become unwell.

**What are the alternatives to the test?**

There is no alternative to this test that will find out why you are feeling thirsty or passing a lot of urine. If you do have diabetes insipidus it is important for us to know so that it can be treated.
The results of the blood and urine samples are analysed. Either the endocrine nurse specialist or your endocrinologist will discuss the results with you when they are available. If the results show that you have diabetes insipidus, they will discuss treatment and further investigations with you.

Who do I contact if I have any questions?

Royal Sussex County Hospital 01273 696955
Endocrine specialist nurse extension 4379
Princess Royal Hospital, Haywards Heath 01444 441881
Endocrine specialist nurse extension 5660

If you have any urgent or emergency questions then your GP can advise you or they will contact the hospital on your behalf.

Patient self-help groups and further information:

The Pituitary Foundation  86 Colston Street, Bristol BS1 5BB
Website: www.pituitary.org.uk
Email: helpline@pituitary.org.uk
Support and Information Helpline: 0117 370 1320
Monday-Friday 10am-4pm
Pituitary Foundation Endocrine Nurse Helpline: 0117 370 1317
providing medical information and support
Monday 10am to 1pm; Monday 6pm to 9pm; Thursday 9am to 1pm.