

Urodynamic Investigation in the Department of Clinical Measurements

What is a urodynamic investigation?

It is a detailed investigation into all aspects of your bladder function, recording its strengths and weaknesses.

Why do I need this investigation?

To determine the cause of your bladder symptoms and enable your consultant to plan appropriate treatment and / or surgery.

What are the potential risks of this investigation?

The last audit in our department showed an approximate 1% (one in one hundred) risk of you developing a urine infection afterwards.

Important information for you prior to your investigation

Please read your appointment letter carefully and contact the Department of Clinical Measurements as requested if any of the starred points in the letter are relevant to you.

You have been asked to fill in a chart, recording the amounts of urine you pass. Please take time to do this as it will help us to obtain a more accurate diagnosis. If you have any concerns about completing this chart, please telephone us for advice.

If you have symptoms of a urine infection leading up to your investigation, please arrange a visit to your GP to exclude or treat any possible infection. These symptoms may include cystitis, stinging and burning when passing urine, feeling feverish or having smelly or cloudy urine. If you

are in any doubt or have any further questions regarding this please contact us by telephone as soon as possible.

Please bring a fresh urine sample collected on the day of your investigation with you to your appointment.

It would also be helpful if you could bring in a list of your current medications.

If you are unable to attend for any reason, please inform us as soon as possible by telephone so that we may offer the appointment to someone else.

Please allow up to 2 hours for the investigation to be completed. Occasionally the investigation can take longer than planned. If your investigation is delayed, we will endeavour to inform you as soon as possible.

It is important that you drink some extra fluid, the day prior to, and on the day of the investigation to ensure you are hydrated. It is also very helpful if your bladder is fairly full when you arrive.

What happens during the investigation?

A nurse and a clinical physiologist will conduct your investigation. The number of staff involved will be kept to a minimum although occasionally, with your permission, a trainee may be present.

Your nurse or physiologist will greet you and show you through to the changing room. They will obtain some information from you, explain the investigation in detail and ask your permission to proceed with the investigation.

You will be given a hospital gown to change into and then shown through to the investigation room.

At the beginning of the investigation you will be asked to pass urine, in privacy, into a special toilet. Following this an ultrasound scan will be performed to measure the amount of urine remaining in your bladder. This simply involves placing some special gel on your tummy and then using a device, resting on your skin, to take a picture of your bladder.

The investigation requires the use of 2 small catheter tubes that measure pressure and a third which is used to fill your bladder artificially.

One of the pressure catheters, along with the filling catheter is inserted into the bladder. These catheters do not drain urine. A small amount of lubricating or local anaesthetic gel is introduced into your urinary passage (urethra), this sometimes gives mild discomfort (stinging). This will ease as the local anaesthetic starts to work. The catheters will be gently passed up the urethra into the bladder. This also feels strange and may sting slightly as the catheters are inserted but the feeling quickly wears off. The second pressure catheter is then inserted into your vagina or rectum to measure abdominal pressure. It is inserted with lubricating gel and should not cause any discomfort.

A further ultrasound scan may be performed at this stage. We will then begin to fill your bladder artificially with a saline (salty) solution via the filling catheter. We will continue to fill your bladder until you experience a strong desire to pass urine, at which point the filling catheter will be removed.

During the investigation you will be asked some questions about your bladder symptoms and relevant medical history. Your answers will help us to produce a detailed report for your consultant.

You may then be asked to perform some gentle exercises in order to demonstrate your symptoms. If you are unable to do any of these exercises, the investigation will be adjusted to suit your ability.

Towards the end of the investigation you will be asked to attempt to pass urine in privacy, into the specially adapted toilet this time while the catheters are in place. Another ultrasound scan will assess whether your bladder has emptied normally.

The bladder catheter will then be removed using a special device which pulls the catheter out at a constant speed. Finally the rectal (or vaginal) catheter will be removed.

Occasionally, you may be asked to pass urine a further time after the catheters have been removed. If this is the case another ultrasound scan will be performed following this.

What happens after the investigation?

You may experience slight stinging or burning when you pass your water for the rest of the day. These symptoms should quickly improve. You may also pass a little blood with the urine the first time you pass water. There is a small risk of developing a urine infection after this test, if this happens the stinging will get worse and you may become feverish. If this occurs you should see your GP as soon as possible. Please telephone to inform us.

Following the investigation you will be given an advice sheet specifying how much extra fluid to drink over the next 48 hours - this only applies during the daytime.

The findings of the test are generally sent to your consultant who will then write to you or arrange for you to be seen in the out-patient clinic to explain the findings of the investigation and advise you of any further treatment.

Any further questions?

If you have any further questions about the tests, or wish to speak to one of our clinical physiologists or nurses regarding your appointment, please telephone the **Department of Clinical Measurements (01392) 402142 or (01392) 402144.**

These tests are time consuming and costly and therefore, if you are unable to attend your appointment for any reason, please inform us as soon as possible on the number above so we may offer your appointment to someone else.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by Royal Devon staff undertaking procedures at the Royal Devon hospitals.

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