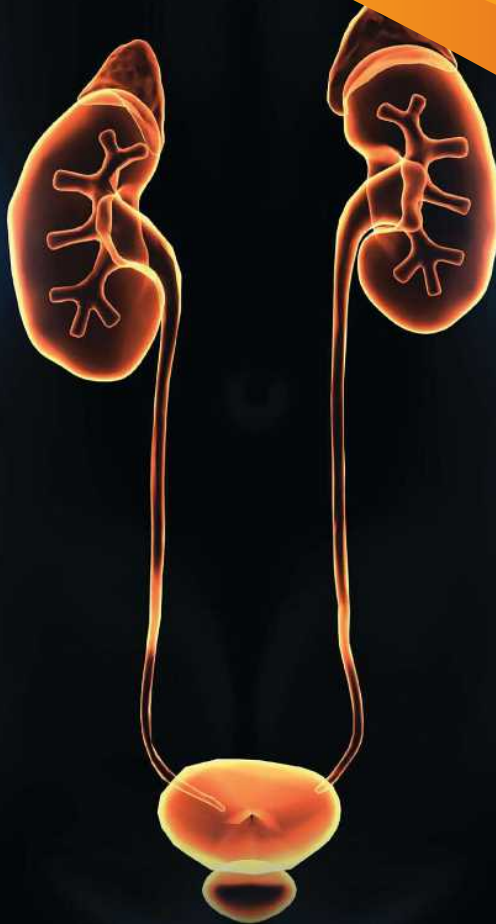




National University
Hospital

Urodynamic Study (UDS) and Video-Urodynamic Study (VUDS)

UROLOGY CENTRE



A urodynamic test is performed to get more information about your urination process and to check if your bladder muscles are working well. We are trying to reproduce your urinary symptoms during the study.



A UDS includes cystometry and uroflowmetry in the same sitting. VUDS involves the use of fluoroscopy to view the whole urination cycle as the test is being performed. The traces produced by the UDS/VUDS can be viewed on the screen of the computer and results of the study can be interpreted.



These studies are performed to understand your condition better so that the right treatment/advice can be given.

Indications for UDS/VUDS

- Mixed incontinence
- Overactive bladder (OAB)
- Failed medical therapy for OAB/benign prostatic hyperplasia
- Suspected bladder outlet obstruction
- Neurological conditions with urinary symptoms
- Neurological conditions with involvement of upper urinary tracts
- Planning for specific surgeries which require assessment of the bladder or urethra
- Previous surgery with persistent urinary symptoms
- Incontinence after surgery (e.g. transurethral resection of the prostate, radical prostatectomy, mid-urethral slings)
- Voiding dysfunction



Preparation

The study will take 30 to 60 minutes. Please check with your doctor if you need to stop taking your medication before the study. A check on your urine sample may be conducted to test for infection. A VUDS will involve small doses of radiation.

If you have an infection, you should be treated with antibiotics before the urodynamic study. Please bring the results of the urinary test to your appointment if it is not done at the hospital.

Do complete the bladder diary before the study. It contains very useful information for the urologist.



Please complete the
BLADDER DIARY
before the study



Please arrive
30 MINUTES
before the study



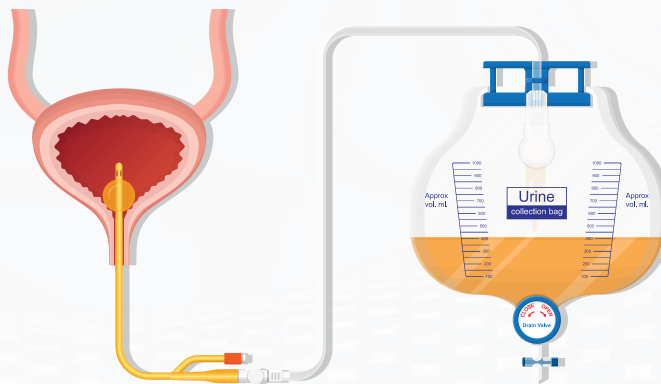
You can
HAVE A MEAL
before the study

The procedure

How is the urodynamic test performed?

Cystometry

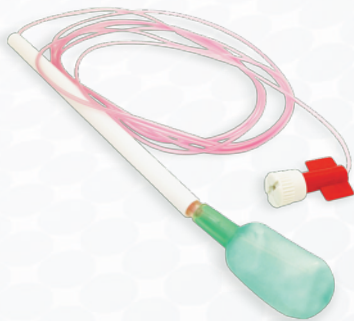
- You will be brought to a quiet room with your nurse and attending urologist.
- In a lying position, and with a local anaesthetic gel, a small catheter will be inserted into your urethra. Another catheter will be inserted into your rectum. Both catheters will be taped to your body.
- Both catheters measure the pressure in your bladder and your abdomen, with the traces being reflected on the computer screen.
- Sensing electrodes may be placed near your rectum and these will monitor the activity of the pelvic muscles.
- You may be asked to stand or sit throughout the study. We may ask you to change your position if required.
- Using the catheter, your bladder will be filled with a sterile saline fluid and you will be asked to cough or bear down to test your bladder reaction throughout the test.
- The doctor will check if there is any leakage of urine and if you have any abnormal urge to urinate.
- When your bladder is completely full, you are asked to empty your bladder while pressure is being recorded. This is done with the urethral catheter in your bladder.





Urodynamic room

Fig 1: Catheters



Rectal catheter



Urethral catheter

Uroflowmetry

- The urinary flow will be recorded and you may be asked to do certain actions to assist in the flow.
- The residual urine volume will be measured.
- At the end of the cystometry test, the catheters and sensors will be removed.



Fig. 2: Uroflowmeter
- A common type of uroflowmetry container for men and women.

Risks of UDS/VUDS

UDS/VUDS is generally a safe and well-tolerated study. However, some complications such as high blood pressure and urinary tract infection can occur.

Sudden high blood pressure (autonomic dysreflexia)

Some patients with neurological conditions (e.g. spinal cord injury) have a risk of sudden high blood pressure (autonomic dysreflexia) during UDS/VUDS. It is a sudden and exaggerated automatic response to various stimuli in patients with spinal cord injury or spinal dysfunction. Sudden high blood pressure can be life-threatening if not properly managed. We will need to closely monitor the blood pressure of these patients during the tests. Please let your urologist know if you have any spinal cord injuries or concerns.

As UDS/VUDS is an invasive procedure, there is a small risk of urinary tract infection. Please contact the Urology Centre if you experience symptoms such as painful urination, fever or blood in the urine after the procedure.

Prophylactic antibiotics may be given before, during or after the procedure.



Follow-up

Upon completion of the tests, your doctor will discuss the results with you, and any further treatment you may require. Drink plenty of liquids after the tests to reduce discomfort while urinating.



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Closed on Sat, Sun & Public Holidays



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