What Will Be Done At Urodynamic Study?

Your will be first asked to pass water in a special toilet device in privacy, which will measure the amount and speed of urine that you pass from your bladder. The nurse will then pass a catheter (soft, small plastic tube) through you water passage into the bladder along with a tiny catheter having a special sensor. Another tiny catheter with a sensor will be passed into your back passage. These sensors are connected to the computer. She will next ask you to cough to check for proper reading on the computer and confirm the position of the catheters.

The bladder is filled slowly with sterile normal saline over 5 to 10 minutes via the catheter which has been placed in your bladder. You will be asked to inform the nurse when you have the first sensation of your bladder filling up.

You will be asked to cough as your bladder fills up to check if you leak water during this test and also to bear down to see if there is any abnormal downward movement of your urethra. This part of the examination will be done by the nurse or your attending doctor.

Sometimes you may be asked to pass water at the end of the procedure before the catheter is removed.

It is important to relax throughout the procedure as this will help in getting reliable results at urodynamic study.

When Will I Know The Results?

Once the study is completed your doctor will discuss with you the results of your urodynamic study and advise appropriate treatment.

Urgency/Urge Incontinence or detrusor instability is treated with tablets to quieten the bladder.

Stress Incontinence may need surgical treatment.

Mixed incontinence will require a combination of both treatments.

If you have problems other than urinary incontinence your doctor will discuss the treatment options.

Follow Up

If you are asked to follow up in the Regional Hospital please make sure you arrange the next review date with the secretary in the OPD before you leave.

Unable To Attend Urodynamic Study?

If you are not able to attend the Urodynamic study for any reason, please call the Day Ward Secretary at 061-482223 and cancel or reschedule your appointment. This will help us to schedule another patient from the waiting list to have this test done.

Prepared by:
Mr. H. Flood & Mr. John Drumm, Consultants
Mr. H. Varadaraj, Registrar, Urology Department,
Regional Hospital, Limerick.
Updated: February 2000
Urinary Incontinence

The inability to control the storage or release of urine is known as urinary incontinence.

Definitions-

Bladder: The sac-like muscular organ that stores and expels urine.

Urethra: The exit tube that carries urine from the bladder out of the body.

Urinary Sphincter: The muscle surrounding the bladder opening (bladder neck) and urethra, which closes off the urethra, preventing leakage from the bladder.

Pelvic floor muscles: A group of muscles that surround and support the bladder and urethra.

Mechanism of Incontinence

The urinary sphincter muscle surrounds the urethra and controls the flow of urine. When it contracts around the urethra, it holds urine in the bladder. When it relaxes and the bladder contracts, urine flows out of the body. If either the urinary sphincter or bladder muscles do not work correctly, you may leak urine.

What Causes Incontinence?

Urethral Sphincter Weakness
In women, weakness of the pelvic floor and urethral muscles is the primary cause of stress urinary incontinence and is usually due to multiple pregnancies, child birth and ageing.

Bladder Overactivity
An over active bladder can put too much pressure on an otherwise healthy sphincter. For usually unknown reasons the bladder muscles (or Detrusor) contracts uncontrollably leading to incontinence (referred to as Detrusor Instability).

Types of Incontinence

1) Stress Urinary Incontinence (SUI)
Leakage of urine during physical acts like coughing and straining, which put sudden pressure on the bladder. It is caused by weak urinary sphincter and pelvic floor muscles, and an unsupported bladder neck.

2) Urge Incontinence (UI)
The compelling need to urinate and the inability to hold urine long enough to reach a toilet due to bladder muscle spasms or overactivity of the bladder.

3) Mixed
A combination or urge and stress incontinence, in which symptoms of both are experienced.

What is Urodynamic Study?

This is an investigation that gives your doctor a detailed look at the function of your bladder and urethra. This test will help to evaluate the type of urinary incontinence and is very important to decide the treatment option for your problem. This study is also used in males to measure the urine flow rate referred to as Uroflometry. It is also used to study the bladder function in males and females with bladder dysfunction caused by damage to spinal cord, bladder nerve problems or weak bladder muscles.

What Preparation is Needed For This Study?

There is no need to fast. Try to arrive for the study with a full bladder. If your doctor has asked you to fill a urine frequency/volume/leak chart, remember to bring it along. If you are on any medications remember to bring the details. The study will be done in the urodynamics room in the Urology/Surgery OPD.

How Will The Urodynamic Study Be Done?

This procedure does not require any anaesthesia and is generally painless. Therefore don’t be worried and try to relax as this will help in getting reliable results during the study. The entire procedure may take about 20 minutes on average. The nurse who will assist in performing this study will explain the procedure step by step.

Is There Any Complication?

There is a very small risk of urinary tract infection in 1-2% of patients following urodynamic study, which would need antibiotic treatment.