

Urodynamic study

What is a fluoroscopic urodynamic study?

A urodynamic study checks how your bladder works by taking pressure readings using computerised equipment. 'Fluoroscopic' means that X-rays are taken at the same time to give an outline of your bladder and urethra (the tube that allows urine to pass from the bladder to the outside).

Why should I have one?

A urodynamic study is the best test to assess how your bladder and urethra are functioning. It provides information that can help diagnose urinary tract problems and help determine best treatment.

Common problems doctors recommend a urodynamic study for include:

- female urinary incontinence brought on by activity such as coughing or exercise ('stress incontinence')
- frequent and urgent urination or incontinence on the way to the toilet ('urge incontinence')
- poor urinary stream and a feeling that the bladder isn't properly empty
- men with urinary blockage symptoms where it is unclear if the problem is prostate related
- men with incontinence after prostate surgery
- urinary difficulties associated with neurological diseases including problems such as spinal cord injuries, multiple sclerosis or Parkinson disease
- painful bladder conditions
- prolapse problems in women.

What is the aim of the test?

The aim is to reproduce your troublesome urinary symptoms so that further treatment can be accurately planned. This is important to remember, as some people are embarrassed and try to avoid 'wetting' during the study. Do not be embarrassed. It is in fact very useful if you do lose urine during the study (if this is the problem for which you are having the test) as seeing how your bladder behaves at its worst provides your doctor with more information.

How do I prepare for the test?

- Ensure that you have completed a bladder diary

- Ensure that you have had a recent urine specimen to check for urinary tract infection
- Stop any 'overactive bladder' (anticholinergic) medications 5 days before the test (eg. Ditropan®, Detrusitol®, Vesicare®, Enablex®, Oxytrol® patch)
- Continue taking all your other medications (including warfarin and aspirin)
- If possible, attend with a comfortably full bladder. Do not overfill your bladder – you should not be in pain
- You do not need to fast
- As no sedation is given, you can drive yourself to and from the appointment.

What happens during the test?

You will first be asked to pass urine into a special toilet that measures your urine flow.

Next, very slim tubes (catheters) are inserted by a urology nurse into the bladder and rectum. These fine tubes are connected to a computer to measure the pressure in the bladder. The bladder tube is also used to gently pump fluid into the bladder rather than waiting for your bladder to fill up normally again.

Tell the doctor about any bladder urgency or discomfort during the procedure.

During the test you will be asked to cough, strain and pass urine to determine how your urinary tract functions. Remember that it is expected that you may leak urine during the test – don't be embarrassed by this as it will help work out what the problem is.

Urodynamic studies are often combined with another test such as flexible cystoscopy (when a fine telescope tube is inserted into the urethra to look at the bladder lining).

After the procedure you will be given a dose of antibiotic tablet to reduce the chance of urinary tract infection. You will need to stay for a short while to check that you can pass urine easily after the test.

How long will it take?

The actual test takes about 30–40 minutes. However, the preparation time can take longer and you should allow at least 2 hours.

Will it be uncomfortable?

Local anaesthetic gel is used to numb the area before inserting the tubes but there may be some mild discomfort. Most patients find that the test is not as unpleasant as the chronic bladder problems with which they have been living.

Is it safe?

Although very safe, there are a few situations in which the study is not recommended or may need to be modified. Tell the doctor if:

- you are allergic to iodine or X-ray contrast
- you are allergic to any antibiotics
- you are pregnant or could be pregnant.

Are there any complications?

Generally this is a very safe test with a low rate of complications. However, the following can occur:

- burning discomfort on passing urine – which usually resolves in 24 hours with an increased fluid intake and, if required, use of Ural® sachets and paracetamol
- blood in the urine – which is usually temporary and clears with increased fluid intake
- urinary tract infection – if you have symptoms of infection (with marked increase in urinary frequency, pain on urination, urgent urination or high temperatures), please inform your doctor as you may need treatment with antibiotics. The rate of urine infection is reduced by the antibiotic you receive after the test
- rarely, difficulty in urination which can result in the need for a temporary catheter.

When will I know the results?

The doctor will explain the results on the day, but a follow up appointment is necessary to discuss in more detail and to properly plan your treatment.

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