Urology Department

Urodynamics (or pressure tests on the bladder)

What is the evidence base for this information?
This leaflet includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence based sources; it is, therefore, a reflection of best practice in the UK. It is intended to supplement any advice you may already have been given by your urologist or nurse specialist as well as the surgical team at Addenbrookes. Alternative treatments are outlined below and can be discussed in more detail with your urologist or specialist nurse.

What does the procedure involve?
Filling of the bladder through a catheter and recording of the bladder response to filling and emptying.

What are the alternatives to this procedure?
Observation, treatment without the information that this test might produce.

What should I expect before the procedure?
You have been asked to attend for urodynamics, a test which measures and records bladder function.

We ask that you submit a urine test for infection to your GP surgery one week before this appointment because we cannot perform the study if you have active infection in your urine. Please bring the result of this urine test with you when you attend for your study together with a fresh sample for the morning of your study.

Please come with a comfortable full bladder so we may undertake a flow rate test.

Please ensure that any medication for your bladder symptoms, eg eg Oxybutynin ( Ditropan ), Tolterodine ( Detrusitol ), Solifenacin ( Vesicare ), Trospium ( Regurin ) Mirabegron ( Betmiga ) Darifenacin ( Emslelex® ), Duloxetine ( Yentreve® ) or Propiverine ( Detrunorm® ) is stopped a week before your test.

You may be asked to undergo swabbing of your nose and throat to ensure that you are not carrying MRSA. Sometimes this is done prior to your appointment.

Please be sure to inform your urologist in advance of your surgery if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
• any other implanted foreign body  
• a prescription for Warfarin, Aspirin, Rivaroxaban, Dabigatran, Apixaban, Edoxaban or Clopidogrel, Ticagrelor, Acenocoumarol, Phenindione or any other blood thinning medication  
• a previous or current MRSA infection  
• high risk of variant CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human derived growth hormone)

**What happens during the procedure?**
In adults, the procedure is normally performed with the aid of a small amount of local anaesthetic gel passed into the urethra (water pipe). The test will usually be performed by a specialist nurse and/or a urologist. On arrival in the department, you will be asked to pass urine into a device called a flow-rate machine so, if you are able to pass urine, please ensure that you arrive with your bladder comfortably full.

**Equipment used for urodynamics**
You will be positioned comfortably on a couch and two small tubes inserted, one into the urethra (water pipe) and the other into the anus (back passage). After the tubes have been inserted, your bladder may be emptied and the tubes connected to the measuring apparatus.

During the test, your bladder will be filled slowly with water at a measured rate. You will be asked to cough and strain at intervals and to tell us when you first feel the desire to pass urine. You will then be encouraged to hold on until your bladder feels quite full. If one of your symptoms is leakage of urine, we will try to reproduce this so that we can see what the bladder is doing when the leakage occurs. Patients often find this embarrassing but it is a necessary part of the information needed to treat your symptoms. Be reassured that it is an important part of the test and that we will do all we can to be as supportive as possible during this process.
What happens immediately after the procedure?
When the procedure has been completed, you will again be asked to pass urine into the flow rate machine. The tubes will then be removed and you will be able to dress while the results of your test are being analysed.
After the test, an outpatient appointment will be requested to discuss the results and any further treatment.
When you go home, we would like you to drink plenty of fluids for the next 24 to 48 hours in order to flush your system through.

Are there any side effects?
Most procedures have a potential for side effects. You should be reassured that, although all these complications are well recognised, the majority of patients do not suffer any problems after a urological procedure.
Please use the check boxes to tick off individual items when you are happy that they have been discussed to your satisfaction:

Common (greater than one in 10)
- Discomfort on passing urine
- Bloodstained urine

Occasional (between one in 10 and one in 50)
- Urine infection
- Inability to pass urine (retention of urine), requiring temporary insertion of a catheter
- Inability to pass the catheter into the bladder, requiring further investigation

Rare (less than one in 50)
- Failure to give a definitive diagnosis, sometimes requiring that the test be repeated

What should I expect when I get home?
If you experience flu-like symptoms, shivering or shaking, any pain or burning when passing urine or a high temperature, you should contact your GP since you may require treatment with antibiotics.
If you are unable to pass urine after the test, you should contact your GP or the specialist nurses immediately.

What else should I look out for?
The urodynamic study may not give a definitive diagnosis for your symptoms. Some patients need to have further studies combined with X rays of the bladder as it is filled (videourodynamics) before a definitive diagnosis and treatment plan can be agreed.

Are there any other important points?
You will normally be given an outpatient follow up appointment after the test to discuss any further treatment. Additional or alternative treatment may, however, be recommended at the time of the test by the doctor.
Driving after surgery
It is your responsibility to ensure that you are fit to drive following your surgery.

You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

Privacy & Dignity
Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high tech equipment and/or specialist one to one care is required.

Hair removal before an operation
For most operations, you do not need to have the hair around the site of the operation removed. However, sometimes the healthcare team need to see or reach your skin and if this is necessary they will use an electric hair clipper with a single-use disposable head, on the day of the surgery. Please do not shave the hair yourself or use a razor to remove hair, as this can increase the risk of infection. Your healthcare team will be happy to discuss this with you.

References
NICE clinical guideline No 74: Surgical site infection (October 2008); Department of Health: High Impact Intervention No 4: Care bundle to preventing surgical site infection (August 2007)

Is there any research being carried out in this field at Addenbrooke’s Hospital?
There is no specific research in this area at the moment but all operative procedures performed in the department are subject to rigorous audit at a monthly audit and clinical governance meeting.

Who can I contact for more help or information?

Oncology nurses
Uro-oncology nurse specialist
01223 586748

Bladder cancer nurse practitioner (haematuria, chemotherapy and BCG)
01223 274608

Prostate cancer nurse practitioner
01223 274608 or 216897 or bleep 154-548

Surgical care practitioner
01223 348590 or 256157 or bleep 154-351
**Non-oncology nurses**  
**Urology nurse practitioner (incontinence, urodynamics, catheter patients)**  
01223 274608 or 586748 or bleep 157-237  
**Urology nurse practitioner (stoma care)**  
01223 349800  
**Urology nurse practitioner (stone disease)**  
01223 349800 or bleep 152-879  
**Patient Advice and Liaison Centre (PALS)**  
Telephone: +44 (0)1223 216756  
PatientLine: *801 (from patient bedside telephones only)  
E mail: pals@addenbrookes.nhs.uk  
Mail: PALS, Box No 53  
Addenbrooke's Hospital  
Hills Road, Cambridge, CB2 2QQ  
**Chaplaincy and multi faith community**  
Telephone: +44 (0)1223 217769  
E mail: chaplaincy@addenbrookes.nhs.uk  
Mail: The Chaplaincy, Box No 105  
Addenbrooke's Hospital  
Hills Road, Cambridge, CB2 2QQ  
**MINICOM System ("type" system for the hard of hearing)**  
Telephone: +44 (0)1223 217589  
**Access office (travel, parking and security information)**  
Telephone: +44 (0)1223 596060  

**What should I do with this leaflet?**  
Thank you for taking the trouble to read this patient information leaflet. If you wish to sign it and retain a copy for your own records, please do so below.  
If you would like a copy of this leaflet to be filed in your hospital records for future reference, please let your urologist or specialist nurse know. If you do, however, decide to proceed with the scheduled procedure, you will be asked to sign a separate consent form which will be filed in your hospital notes and you will, in addition, be provided with a copy of the form if you wish.  
I have read this patient information leaflet and I accept the information it provides.  

Signature............................................................Date...........................................
We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

**Other formats:**

If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team:

patient.information@addenbrookes.nhs.uk.

Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

**Document history**

Authors Mr Nikesh Thiruchelvam (on behalf of the Consultant Urologists)  
Pharmacist Eilis Rahill  
Department Department of Urology, Box No 43  
Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ  
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