Introduction.

Your child’s doctor/nurse has advised you that your child needs to have urodynamics. This fact sheet aims to support the discussion you had with the clinician and to enable you to make an informed decision.

What is urodynamics?

Urodynamics is a test that looks at how the muscles in the bladder and urethra (the tube you pass urine through) work. It measures the pressure inside the bladder and can help us to understand what signals the bladder may or may not be receiving from the spinal nerves.

What are the benefits of my child having urodynamics?

The test will help improve the doctor or nurse’s understanding of your child’s incontinence or urinary problem. This can be helpful in deciding the best treatment for your child.

Important information

Your child’s appointment letter will include information for your GP to prescribe antibiotic treatment. This treatment is necessary to reduce the risk of your child developing a urinary tract infection.

- You must contact your GP as soon as you receive the appointment letter to obtain a prescription for antibiotic treatment.
- Please let your GP know if your child is already taking antibiotics or if they have any allergies.
- The treatment is given for three days and is usually Trimethoprim – unless your child has an allergy to this.
- The antibiotic treatment must be started 24 hours before the test.
- Failure to start antibiotic treatment before urodynamics may mean that your child’s test is postponed.
- If your child is unwell for any reason and cannot attend please contact the Urology Nurses. Your child cannot attend if they have a urinary tract infection.
- If your child has kidney problems and are cared for by a Nephrologist (kidney doctor) your child may need to take antibiotics for a week before the test. Please contact the Urology Nurses for advice when you receive the appointment letter.

If your child is taking medication to help improve their continence you may be advised to stop this medication before the test. This is because the medication can affect how the bladder muscles behave. Your child’s doctor or nurse will give you advice with regards to this.
Preparing your child for urodynamics.

If you or your child are worried about urodynamics it may be helpful for you to talk to a Urology Nurse before the test. Please let us know if your child wants to visit the X-Ray Department and try the Entonox (giggle gas) before the day of the test.

It is common for some children to leak urine during the test. It is helpful to reassure them before the test that this is nothing to worry about.

Your child can eat and drink as normal before their test.

If your child self-catheterises or has a stoma please bring catheters and spare stoma bags to the test.

Can parents and carers stay with the child?

- Two parents or carers can attend with their child. If you would like to stay near your child during the test you will wear a lead apron to protect you when the X-Ray pictures are taken.

- If you are pregnant or think you may be pregnant it is very important you tell a member of staff. You will not be able to stay with your child but will need to stand behind a protective screen.

- If your daughter is attending for the test and there is a chance she may be pregnant you should inform staff before the test.

Siblings or other children should not attend the appointment.

Will urodynamics hurt my child?

Your child may experience a little discomfort during the test.

What should we expect to happen on the day of the test?

- The procedure takes place in the X-Ray Department at Alder Hey hospital. On arrival you should book your child in at the X-Ray reception desk. You will then be directed to the waiting room. The Urology nurse will call your child’s name once they are ready and you will be asked questions about your child’s previous medical history, any medications they are taking and any allergies.

- Your child will then be asked to undress from the waist down; this includes their underwear and socks. Your child will be offered a gown to wear. There is somewhere private to get changed. Babies should have their nappy removed.

- Your child will be asked when they last passed urine (had a wee). If it was not within the last hour they will be asked to try to empty their bladder before the test.

- Once your child is ready they will be asked to lie down on a flat bed. It is important that your child keeps as still as possible during the test. It may be helpful for them to bring a favourite book or video game. Infants may be bottle fed during the test.

How long will this procedure take?

The procedure takes between one and two hours.
The urodynamic test

- To carry out the test a thin tube (catheter) will be inserted into your child’s urethra (the tube where your child passes urine). It is important that your child is as relaxed as possible and they can use Entonox (giggle gas) if they wish. Entonox helps them to relax and eases any discomfort they may feel during insertion of the catheter.

- Once the catheter is in place the discomfort should pass. Sometimes the catheter may make your child feel like they need to pass urine (wee). This is normal and quickly passes.

- Some children may need to have a general anaesthetic and have the catheter put in whilst they are asleep. This involves a minor operation to insert a catheter into the bladder through the abdominal (tummy) wall. This type of tube is called a suprapubic catheter. If this is necessary our child will be admitted the day before the urodynamics.

- If your child self-catheterises they can pass the catheter themselves for the test.

- Your child will also need to have a small balloon inserted into their rectum (back passage). This rectal tube measures the pressure inside the abdomen and makes it possible to identify your changes in your child’s bladder pressures. The nurse, using lots of lubricating gel, gently inserts the tube into your child’s back passage. It is not painful but if your child is particularly anxious they may use the Entonox (giggle gas).

- Children with a stoma will have the tube inserted into their stoma.

- Sometimes a urine sample is collected from the catheter to ensure that your child does not have a urine infection. If your child does have an infection then you will be informed and advised regarding treatment.

- Once the catheters are inserted they are connected to a special machine and the test begins.

- All the information during the test is recorded and the nurse will takes notes during the test. The bladder is slowly filled with sterile fluid or dye. This dye shows up on X-Ray pictures, which means that the doctor or nurse can clearly see your child’s kidneys, bladder and urethra (wee tube). X-Ray pictures will be taken during the test. You and your child will be told when any X-Ray pictures are to be taken.

- If your child can talk they may be asked questions about whether they can feel their bladder filling and when they feel like they need to pass urine (wee). To confirm that the test is working properly your child will be asked to cough at regular intervals, if they are able to do so.

- Sometimes the bed may be moved to a standing position during the test. You and your child will be advised about this before the move happens.

- Your child, if able, will then be asked to empty their bladder. If they are toilet trained they will do this on a special toilet. This toilet records the rate at which your child’s urine flows and how much urine they pass. It is common for the catheter to fall out whilst they empty their bladder.
If your child empties their bladder using a catheter then they can do this as normal. The nurse will then remove the rectal tube. One final X-Ray picture is taken to ensure the bladder is empty. Your child will then be allowed to get dressed.

### Test results

The nurse or doctor will discuss the results of the test. A full diagnosis may not be made and treatment may not be started until your child is next seen in clinic. The results of the test will be sent to you, your child’s GP and Consultant.

### What are the risks of my child having urodynamics?

X-Ray pictures are taken during the test. However, risk from radiation is minimal.

On rare occasions a child may have an allergic reaction to the fluid that is inserted into the bladder during the test. Symptoms of allergic reaction include nausea, vomiting, itching and hives. Very rarely an anaphylactic reaction may occur. Staff are experienced at recognising signs of an allergic reaction and will stop the test immediately and administer treatment if required. There is emergency equipment available should it be required.

Further information on risk is listed in the manufacturer’s patient leaflet (Urografin®) and copies can be obtained from the Radiology Department.

### Are there any alternatives to this procedure?

Non-invasive tests, such as urine flow rates and ultrasound, can be done. However, they do not provide information about how the bladder muscles work. There is no alternative to urodynamics that can provide the same information.

### What will happen if I decide my child will not have urodynamics?

Some children do not need to have this test but it does give us extra information that can be helpful in deciding the best treatment for your child. For some children this is a necessary test, particularly for those children who may be at risk of damage to their kidneys or children’s who are planned to have surgery based on the results of the test.

If you have any questions or concerns please talk to your child’s doctor or nurse.

### Discharge information.

When at home it is important for your child to drink plenty of fluids. This is to encourage a good flow of urine through the bladder and also reduce the risk of your child developing a urinary tract infection. Your child will need to complete a three day course of antibiotic treatment.

They may complain of some mild discomfort or stinging when they pass urine but this should settle. If you have any concerns please contact the Urology Nurses on the numbers below.

### Going home.

Your child will be allowed home or back to school as soon as the appointment ends.
Further appointment information.

Your child will receive an appointment to see a Consultant or Urology Nurse to discuss the results and future plans for treatment.

For further information.

Please contact the Urology Nurses on 0151 252 5852, Monday to Friday, 9.00 am – 5.00 pm

This fact sheet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child’s treatment.

This information can be made available in other languages and formats if requested.

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