



Video urodynamics

This information explains about the video urodynamics test, what is involved and what to expect when your child comes to Great Ormond Street Hospital (GOSH) to have one.

What is a video urodynamics test?

A video urodynamics test is a specialised type of test that measures the pressure inside your child's bladder. It may be suggested if your child is having trouble staying dry (continent) or has other problems weeing (urination). It may also be suggested if your child has structural problems with their urinary system. Contrast material, a liquid that shows up well in x-rays, is inserted into your child's bladder while a series of x-ray pictures are taken and the pressure inside the bladder is measured.

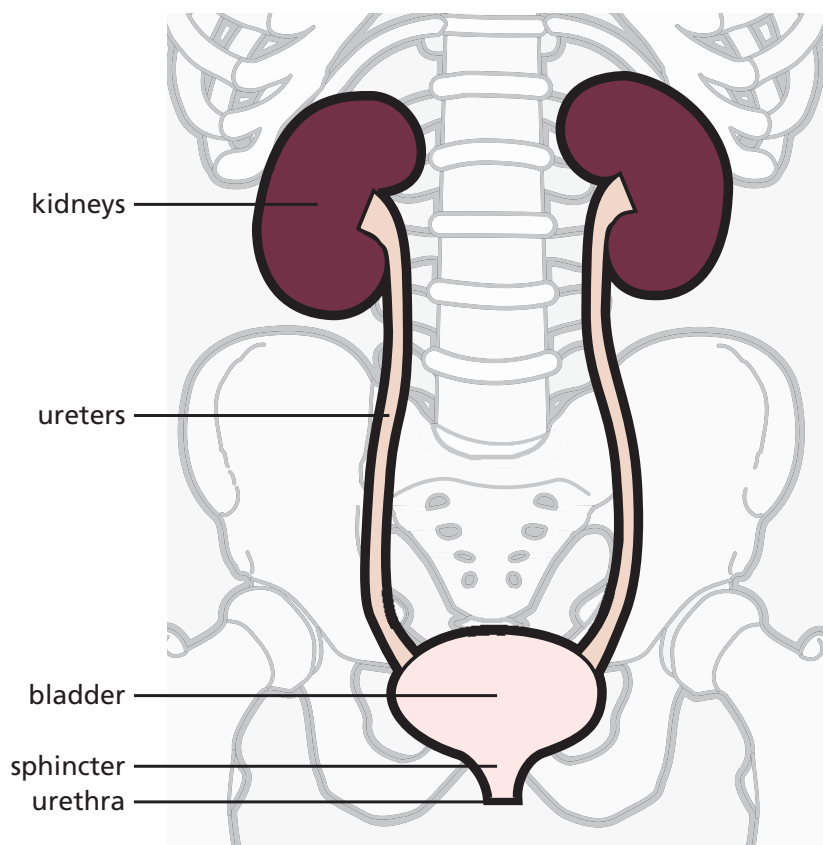
Are there any alternatives?

Various types of scan such as CT, ultrasound and x-rays can show the size and shape of your child's urinary system but not how it is working. The results of the scan are used to plan your child's treatment.

When you receive your appointment letter

If you are unable to keep this appointment, please inform the department at least two weeks beforehand. Sometimes, we can offer the appointment to another child on the waiting list.

We will send a 48-hour measuring chart to record how much fluid your child drinks and how much they wee in a two day period. Please remember to bring this with you to the appointment as we may have to reschedule the test if we do not have this vital information.



Before the scan

Please note: if your child already has a Mitrofanoff or supra pubic catheter in place, this will be used rather than insert two catheters as described below.

A day or two before the scan is scheduled, your child will need to come to GOSH for a short procedure with a general anaesthetic to insert two catheters (thin plastic tubes) through the skin into their bladder. Your child's doctor will explain the operation in more detail, discuss any worries you may have and ask your permission for the operation by asking you to sign a consent form. An anaesthetist will also visit you to explain about the anaesthetic in more detail and options for pain relief afterwards. If your child has any medical problems, please tell the doctors about these.

After the procedure, your child will come back to the ward to recover from the anaesthetic and can go home or to the Patient Hotel when they feel well enough. The two catheters will be coiled up next to your child's skin and covered with a dressing. Your child should keep this dressing clean and dry until the scan so a wash with a flannel is preferable to a shower or bath. Your child may feel a bit uncomfortable after this procedure but paracetamol or ibuprofen should be strong enough to deal with any discomfort. Drinking plenty of fluid after the procedure can also help.

The day of the scan

Please arrive at the Urodynamics Unit at the time stated in your child's appointment letter.

Legally, we are obliged to ask any girls over the age of 12 whether there is any chance they might be pregnant. This is to protect babies in the womb from receiving unnecessary radiation. We will also ask mothers or other female carers if they could be pregnant, especially if they are planning to come into the scanning room with their child. If you are pregnant, we suggest you bring another member of the family with you to be with your child during the scan instead.

The nurses will check that your child has recovered from the procedure to insert the catheters and is fit and well for the imaging scan. They will then take you and your child down to the X-ray department. Your child will need to wear a hospital gown for this test but can keep a vest or t-shirt on underneath. Any metal on their everyday clothing, such as zips or buttons, will show up on the scan, giving a misleading result.

The scan

You will be able to stay with your child throughout the scan. The radiographer will ask your child to lie on the scanning bed while they insert a catheter into your child's rectum (bottom). The catheter is very small and we use lubricant jelly so this is not painful but may be a little uncomfortable. This catheter measures the pressure inside your child's abdomen during the test. They will then remove the dressing covering the two catheters and flush them with water to make sure they are working correctly.

One of the catheters will be connected to a computer to measure the pressure inside the bladder and contrast liquid is dripped through the other catheter into your child's bladder. While the bladder is filling with contrast liquid, the radiographer will take a series of x-ray pictures at regular intervals so your child will need to lie very still.

Once their bladder is full of contrast liquid, the scanning bed will be tilted so that your child is in an upright position. This can feel a bit uncomfortable but does not last long. The radiographer will then ask your child to wee into a container – they will look away if your child is nervous. When your child has finished weeing and their bladder is empty, the bed will be tilted back so they are lying flat again. Any remaining contrast will be removed from the bladder by attaching a syringe to the catheter and draining it off.

When enough pictures have been taken, your child will be able to get off the bed and get dressed. The nurses will snip the tiny stitches holding the two catheters in place, remove them gently and cover the area with a fresh dressing. They will also remove the catheter from your child's bottom. The scan usually takes about an hour but may last longer if your child has trouble peeing towards the end of the scan.

Are there any risks?

The contrast liquid will not interfere with any medicines your child is taking. While x-rays use radiation, we make every attempt to keep the dose as low as possible while still getting the best possible pictures to plan treatment.

There is a risk of infection from the catheters inserted into your child's bladder, so we will give your child a five day course of antibiotics to take at home. Please make sure that they complete the entire course.

After the scan

If they are not having any further tests or scans, you will be free to go home. The radiology doctor will send a report about the scan to your child's doctor.

You should call the Urodynamics Unit or your family doctor (GP) if:

- Your child is in a lot of pain and pain relief does not seem to help
- The wound site looks red, inflamed and feels hotter than the surrounding skin
- There is any oozing from the wound
- Your child has a lot of blood in his or her urine
- Your child develops a high temperature

The team will have a meeting after the test to discuss the results and plan your child's treatment.

We will then offer an appointment in the Outpatients Department, Urodynamics Department or over the telephone to discuss next steps.

If you have any questions,
please telephone the Urodynamics Unit on
020 7405 9200 ext 5916 or 5917