

# Video urodynamics

**This leaflet explains more about video urodynamics, including the benefits, risks and any other treatment options. It also gives information on what you can expect when your child comes into hospital. If you have any questions, please speak to a doctor or nurse caring for your child.**

## What is video urodynamics?

Video urodynamics is a test on the bladder. It looks at how the bladder behaves when it is filling, storing and emptying. X-ray is also used to look at the shape and function of the bladder. This test will take place in the children's X-ray department.

## Benefits

Video urodynamics can be used to diagnose some bladder conditions. Your child might have problems with urinary incontinence or difficulty peeing. Your child might have been born with a condition that affects the bladder, and requires regular monitoring to keep the kidneys safe.

This investigation measures pressure inside the bladder, as well as looking at exactly what happens in the bladder and urinary system when it is being filled, when peeing or wetting occurs. The results of the investigation will help the doctor to plan treatment.

## Risks

A catheter (thin, flexible tube) needs to be placed in to the bladder for this test. This carries the risk of causing a urinary tract infection (UTI). The catheter placed is sterile and is placed by a nurse using a sterile technique, or by the parent, carer or patient (that has had training). If your child does get a UTI, antibiotics might be needed.

The bladder catheter is secured using tape so it does not interfere with the X-rays. It is possible that the catheters might move out of place. We encourage patients to relax on a bed once the catheters have been inserted. There is a small risk that catheters can become kinked or knotted. If this happens the test might need to be stopped and the catheter will be removed.

### Suprapubic catheter (line)

Some patients need a suprapubic catheter, placed under a general anaesthetic for this test. The reason for this will be explained by your doctor.

Your child will be admitted to the ward before the day of the test, or on the morning of the test. There will be 2 small tubes placed into the bladder through the tummy (abdominal) wall and held in place with stitches.

This carries the risk of bleeding from the wound site, or the tubes can become blocked and they can also cause an extravasation injury. This is when the tubes have moved out of place and any liquid will go in to the surrounding tissues instead of the bladder.

These are all temporary risks. If they happen, the catheters will be removed and the test will be stopped. The wound will be covered with a dressing and will heal after a few days. The test will be rescheduled for a later date.

Your child might experience some pain or discomfort with this procedure, pain relief will be given on the ward.

Your doctor will discuss these risks with you when signing a consent form for the test.

All X-ray examinations involve exposure to radiation. The length of time and level of exposure to radiation from medical X-rays is strictly controlled and kept to the minimum possible. The doses that are used in medical X-rays are very low and are very safe. They are similar in strength to other sources of natural radiation that people are exposed to every day, such as from the sun.

Your child might need sedation for the placement of the catheters. This can be Entonox® or a general anaesthetic. If you would like more information about this, please ask a member of staff.

## Other treatment options

Other scans and imaging tests can show the shape and structure of the bladder, but not how it is working and what the pressure is inside the bladder. Because of this, there are no alternatives to this test.

## How to prepare your child for video urodynamics

### Medicine

Some children are on bladder medicines. The doctor might want your child to stop the medicine before the test. This instruction will be given to you in your child's clinic appointment.

### Bladder diary or catheter diaries

Please complete a bladder and bowel diary, or catheter diary if your child regularly catheterises. This will be sent to you with your appointment and should be completed before to the test.

### Not eating and drinking (fasting)

If your child is having a general anaesthetic or sedation, follow the rules in your appointment letter about eating and drinking before admission. If your child is unwell please tell us, [phone 020 7188 9098](tel:02071889098).

If your child is not having a general anaesthetic or sedation, they can eat and drink normally on the day.

### On the day of the test

If your child already regularly catheterises, you will be told to go straight to the X-ray department for the test, unless instructed otherwise.

If your child wears pads or nappies, or uses catheters, please bring some spares with you.

Before the test your child will be given a gown to change into.

During the test, your child can watch a DVD, listen to music, or use a tablet, so bring their favourite one if you think it will help.

## Giving your permission (consent)

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

## During video urodynamics

This test involves passing a small, soft catheter into your child's bladder and a small catheter in to the rectum. The best way of doing this will have been discussed and agreed between you and your child's doctor. It might involve an admission to the ward in the morning for a general anaesthetic, Entonox, or going straight to the X-ray department and they are completely awake.

If your child already has a Mitrofanoff or suprapubic catheter, this will be used to complete the test.

Once the tubes are in place, and your child has recovered from any sedation, your child will lie on a bed in the X-ray room. The bladder is then filled using the catheter with a warm liquid contrast (a harmless liquid dye that we can easily see on X-ray images). At the same time, pressure readings are taken using the catheter. If your child can stand and pee, the bed tilts and allows the bladder to be assessed upright.

Your child will be asked to indicate when they need to pee or have any sensation in their bladder. They can then pee with the tubes remaining in place, into a funnel.

When the tests are complete, the catheters will be removed and your child can dress and go home. The whole test takes about 1 hour. No sedation is needed for the removal of the catheters.

### **Suprapubic catheters**

These are held in place with a small stitch. A stitch cutter will be used to remove the thread and the catheters are then gently pulled out. The wound site will close and heal very quickly. It will be covered with a small dressing. Keep this clean and dry for 48 hours.

## Will your child feel any pain?

The solution used to clean and prepare the area for the catheter to be inserted might feel cold. Some children feel discomfort when the catheter is put in. To help this, we use a numbing gel or your child's doctor might have arranged sedation. After this your child should not experience any pain or discomfort during the investigation.

Your child might experience some discomfort when removing the catheters, but only for a brief moment. We will use a gentle adhesive remover solution to take off any tape stuck to the skin.

## After your child goes home

Your child can eat and drink as normal and resume normal activities. You should encourage your child to drink extra fluids when you get home and pee regularly.

Be mindful of any signs of a urine infections. Symptoms include pain when peeing, a high temperature (fever), tummy pain, increased frequency of needing to pee, and wetting. Please contact your GP if you are concerned your child has developed a urine infection.

## Follow-up appointments

We will not be able to give you any results on the day of the test. You will have a follow-up appointment with your child's consultant to discuss the results in detail and your child's treatment plan.

Our appointments team will contact you to arrange this. If you have any questions about your follow-up appointment, please contact the urology secretaries, **phone** 020 7188 4610 or the outpatients team, **phone** 020 7188 4000 or **email** [paediatricappointment@gstt.nhs.uk](mailto:paediatricappointment@gstt.nhs.uk)

### Contact us

If you have any questions or concerns about video urodynamics, please contact the admissions team, **phone** 020 7188 9098, Monday to Friday, 9am to 5pm.

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit **web** [www.evelinalondon.nhs.uk/leaflets](http://www.evelinalondon.nhs.uk/leaflets)

### Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, **phone** 020 7188 3003, Monday to Friday, 10am-5pm, **email** [letstalkmedicines@gstt.nhs.uk](mailto:letstalkmedicines@gstt.nhs.uk)

### Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS), **phone** 020 7188 8801, **email** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk). To make a complaint, contact the complaints department, **phone** 020 7188 3514, **email** [complaints2@gstt.nhs.uk](mailto:complaints2@gstt.nhs.uk)

### Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch, **phone:** 020 7188 8815, **email** [languagesupport@gstt.nhs.uk](mailto:languagesupport@gstt.nhs.uk)



**Leaflet number: 5269/VER1**  
Date published: December 2021  
Review date: December 2024  
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