



Radiology

VOIDING CYSTOURETHROGRAM (VCUG)

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, we believe parents and guardians can contribute to the success of this test, and we invite you to participate. Please read the following information to learn about the test and how you can help.

Fast Facts About VCUG

- The VCUG is a video X-ray of the bladder and urinary tract.
- Your child may eat and drink as usual before the test.
- Your child will be awake at all times.
- The test takes about 30 minutes.
- He or she can resume normal activities afterward.

What Is A Voiding Cystourethrogram (VCUG)?

A voiding cystourethrogram (*SIS-toe-you-REE-throw-gram*), or VCUG, is a video X-ray of the bladder and urinary tract at work. The bladder stores urine made by the kidneys until it is time for your child to go to the bathroom.

- To begin the test, your child's bladder will be filled with a special liquid that will be visible on an X-ray.
- A VCUG shows doctors how well the bladder and urinary tract are working. This includes the tubes (ureters) that connect the kidneys to the bladder and the urethra, which is the tube connecting the bladder to the outside of the body.
- A VCUG gives doctors detailed information about your child's bladder and urinary tract that they cannot learn from a physical examination or other kinds of tests.

Home Preparation

- No special preparation is needed.
- Eat and drink as usual.

The Test

A VCUG is done at the Department of Pediatric Radiology of Children's Hospital. In the room will be a pediatric radiology doctor, an X-ray technologist and, sometimes, a nurse. You will see an X-ray machine, a long table, and a television screen. You might explain to your child that the X-ray is a large camera for taking pictures that will be shown on the screen.



- Your child is awake during this test.
- The test takes about 30 minutes.

Your child will be asked to remove his or her clothing, put on a hospital gown, and lie on the table on top of a soft white pad. What happens next depends on whether your child is a girl or boy.

For Boys

kidneys

bladder

urethra

A boy will be asked to lie on the table. The doctor or X-ray technologist will wash the tip of his penis around the opening where the urine comes out, using a cotton swab and liquid soap. This may feel cold.

- The X-ray technologist will then slide a tiny, soft tube, called a catheter, into the opening of the penis. This can be a bit unpleasant, and he may need comforting.
- The X-ray technologist will dim the lights in the room so that the television screen can be seen.
- The doctor will then begin to take X-rays, moving the X-ray machine over your child, but not touching him. The X-ray machine will make a clicking noise as it takes pictures.
- X-rays will be taken as the liquid flows through the catheter, and into the child's bladder. When the bladder is full, he will be asked to urinate into a special bottle. This will make the catheter fall out.
- More X-rays will be taken while he is emptying his bladder.

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For Girls

A girl will be asked to lie on the table holding her legs in a "frog position," bending her knees and putting the bottoms of her feet together. Using a cotton swab and a liquid soap, the doctor or X-ray technologist will wash between her legs to clean the skin. This may feel cold.

- The X-ray technologist will then slide a tiny, soft tube, called a catheter, into the opening where the urine leaves her body. This can be a bit unpleasant, and she may need comforting.
- The X-ray technologist will dim the lights in the room so that the television screen can be seen.
- The doctor will then begin to take X-rays, moving the X-ray machine over your child, but not touching her. The X-ray machine will make a clicking noise as it takes pictures.
- X-rays will be taken as the liquid flows through the catheter and into your child's bladder. When the bladder is full, she will be asked to urinate on a pad or in a bedpan. This will make the catheter fall out.
- The X-ray technologist will ask her to push out all of the liquid while more X-rays are taken. She may feel awkward, but it is an important part of the test.

A Parent's/Guardian's Role During the Test

We welcome your help and support during this test. One parent or guardian is invited to join the child in the examination room. Other adults and children must wait in the waiting room.

This test involves the use of radiation. Women who are pregnant or believe there is a possibility they might be pregnant are not allowed in the examination room. In this case, please bring another adult who can stay with your child during the test.

The X-ray technologist will show you where to stand in the examination room during the test. Please follow the instructions of the medical professionals performing the VCUG.

- The most important role of a parent and guardian during the test is to help your child stay calm and relaxed, particularly when the catheter is being inserted.
- We encourage you to talk to your child and hold his or her hand.
- You may bring along a "comfort" item such as a favorite stuffed animal or "blankie"— for your child to hold during the test.
- Please do not distract the medical team or interrupt the test in any way.
- We welcome your questions, but please ask them before or after the test.

After the Test

When the doctor and X-ray technologist have taken all the X-rays they need, they will check to make sure the pictures are clear, which takes only a few minutes. Before leaving, you will be given contact information for questions and you will be told about follow-up care.

- After a VCUG, your child might feel a little sore the next few times he or she has to urinate. Drinking more liquids may help relieve the soreness more quickly.
- A report of your child's VCUG will be sent to the doctor who prescribed it, usually within 48 hours. If the results are urgent, the referring doctor will be contacted immediately.
- Please contact the doctor who prescribed the VCUG for the results.
- If you have any other questions or concerns about the VCUG, please call the Department of Pediatric Radiology at 412-692-5500, and a nurse or X-ray technologist will discuss them with you.

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Special Needs and Patient Preparation

If your child has any special needs or health issues you feel the doctor needs to know about, please call the Department of Pediatric Radiology at Children's Hospital of Pittsburgh *before the test* and ask to speak with a nurse. It is important to notify us *in advance* about any special needs.

Preparing your child beforehand, as well as comforting your child during the test, will help your child have a more positive experience. Sometimes it is difficult to know how to explain tests to children. If you have any questions about ways to prepare or support your child, or feel your child will have difficulty during the test, please call the Department of Pediatric Radiology at Children's Hospital of Pittsburgh and ask to speak with the child life specialist.

Department of Pediatric Radiology **Children's Hospital of Pittsburgh of UPMC** One Children's Hospital Drive 4401 Penn Ave. Pittsburgh, PA 15224 412-692-5500

To see the list of all available patient procedures descriptions, please visit **www.chp.edu/procedures.**

