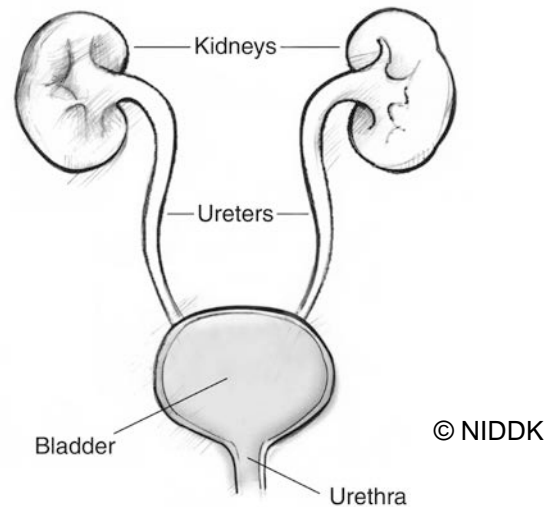


Voiding Cystourethrogram (VCUG)

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. Filling the bladder with a special liquid that is visible on an X-ray enables the doctors to see 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 ultrasound.



How will I prepare my child for the test at home?

- Use our illustrated storybook about VCUG to prepare your child for the test. To access visit: www.med.umich.edu/careguides. Type “VCUG” in the search box and hit the Search button.
- You may want to practice the “frog hold” position at home.
- If you need suggestions on developmentally appropriate language or ideas on how to prepare your child, please call our Child Life Specialist at (734) 232-6744.

How is the VCUG performed?

The VCUG takes place in a room that has an X-ray machine, a long table and a television screen. A Pediatric Radiology doctor, an X-ray technologist, and sometimes a Child Life Specialist (or CCLS in short) will be in the room. You might explain to your child that the X-ray is a large camera that will take pictures the doctor will see on the screen. Your child will be awake during this test. The test takes about 30 minutes.

VCUG in Boys

- Your child will remove his clothing and put on a hospital gown.
- We will ask your child 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 brown liquid soap. This may feel cold. Sometimes we use numbing gel for lubrication.
- 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 the child may need comforting.
- The X-ray technologist will dim the lights in the room so our medical staff can view the television screen properly.
- 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.
- We will take X-rays as the liquid flows through the catheter and into the child's bladder. When the bladder is full, we will ask him to urinate into a towel placed between his legs. Many times urinating causes the catheter to fall out, which is not a problem.
- X-rays are taken while the child is emptying his bladder and even after the bladder is emptied. Occasionally, the bladder needs to be filled a second time in order to obtain the necessary pictures and information.

VCUG in girls

Girls 10-17 years of age must take a pregnancy test before the VCUG because this test uses X-rays to the abdomen. The only exception to receiving a pregnancy test is if the child has a proven absence of ovaries/uterus. Females 18 years and older can sign a waiver. Your doctor can order the pregnancy test ahead of time, or it can be done in our department.

- Your child will remove her clothing and put on a hospital gown.
- We will ask your child 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 brown 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 our medical staff can view the television screen properly.
- 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.
- We will take X-rays as the liquid flows through the catheter and into your child’s bladder. When the bladder is full, we will ask your child to urinate on a pad or in a bedpan. She may feel awkward doing so, but it is an important part of the test. Many times urinating causes the catheter to fall out and this is not a problem.

Frog Hold



- X-rays will be taken while she is emptying her bladder and even after the bladder is emptied. Occasionally, the bladder needs to be filled a second time in order to obtain the necessary pictures and information.

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. This usually takes only a few minutes. Before leaving, you will receive contact information for questions, what to expect after the test and instructions for follow up care.

What is the parent's role during the test?

Your child will need your help and support during a VCUG. One parent or guardian can 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.
- 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 we insert the catheter.
- 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.
- We encourage you to ask questions both before and after the study. If you have questions during the study, it is helpful if you can save them until after the study is finished.

How will I care for my child after the test?

After a VCUG, your child might feel a little sore the next few times he or she urinates. Drinking more liquids may help relieve the soreness more quickly.

We will send a report of your child's VCUG to the doctor who ordered the test, usually within 24 hours. If the results are urgent, we will contact the referring doctor immediately.

Please make arrangements with your child's doctor to get the results of your child's test.

I have more questions about the VCUG. Whom can I call?

Pediatric Radiology Nurse (734) 936- 7907

Child Life Specialist (734) 232- 6744

We are available Monday-Friday between 8am-4pm

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

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Reviewers: Mott Radiology Patient Family Centered Care Committee

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