

Voiding Cystourethrogram (VCUG)



What is a Voiding Cystourethrogram?

A voiding cystourethrogram (VCUG) is an x-ray exam of the bladder and lower urinary tract that uses fluoroscopy and a contrast material. It is often performed on children to check bladder function.

Fluoroscopy makes it possible to see internal organs in motion. When the bladder is filled with and then emptied of a water-soluble contrast material, the radiologist is able to view and assess the anatomy and function of the bladder and lower urinary tract.

If a patient is catheterized prior to the exam we can perform this at either of our outpatient locations. If they have not been catheterized, the exam can only be performed at Methodist Hospital or in our downtown outpatient location.

CPT Code

74455 Voiding (most common) 74430 Nonvoiding 51600 Injection

Indications

This examination is often recommended after a urinary tract infection to check for a condition known as vesicoureteral (VU) reflux. Urinary tract infection may be the only symptom of the problem. A voiding cystourethrogram cannot evaluate obstruction of flow of urine from the kidneys. Additional examinations are needed if obstruction is suspected.

Contraindications

untreated urinary tract infection, hypersensitivity to contrast media, pregnancy

What Happens During the Test?

There is no preparation required for the test. A medical history is obtained and the technologist begins by positioning the child on the table.

Several x-rays are taken of the bladder. After cleaning the genital area, a catheter is inserted through the urethra or penis. The catheter is filled with a water-soluble contrast material. Images are taken during the filling and emptying process under fluoroscopy. After the exam, the catheter is removed.

A voiding cystourethrogram is painless. A local anesthetic is usually applied to minimize the discomfort of inserting the catheter. The antiseptic used to clean and prepare for the insertion of the catheter may feel cold. Some children may experience mild discomfort when the catheter is inserted and the bladder is filled with the contrast material. A parent is allowed to stay in the room to comfort the child but will be required to wear a lead apron to prevent radiation exposure.

After the Exam

After the exam there are no restrictions. Urine may be pink the first time after the catheter is removed. A burning sensation is not unusual after a catheter is removed. Pain and inflammation should subside within one to two days.

The Results

A radiologist will analyze the images and send a signed report to the referring physician within 1 business day.

(Information adapted from www.radiologyinfo.org and Dr. Paul Keller)

This manual is intended for use as merely a guideline for referring physicians and their staff only. It contains information pertaining to the most commonly ordered exams and indications. However, Iowa Radiology does not recommend any particular examination. Individual radiologist preference or patient circumstances may dictate ordering alternative studies. Although contrast codes are not needed to place an order, the following contrast codes may be used in placing orders: CT Contrast Q9967, MRI contrast A9577 and A9579.