

# Retrograde Urethrogram (RUG)

WARWIKI

Patient Information · What to expect before your X-ray of the urethra

A retrograde urethrogram — or “RUG” — is a short X-ray test that takes pictures of your urethra, the tube that carries urine out of your body. A small amount of dye is gently placed into the urethra so it shows up clearly on the X-ray. This helps your surgeon find and measure any narrowing, scar, or injury before planning your treatment.

## About This Test

Scar tissue or a narrowing inside the urethra — called a **stricture** — can be hard to see on a regular scan. A RUG fills the tube with a special dye that shows up white on X-ray. This creates a clear “road map” of the inside of your urethra.

### Your surgeon may order a RUG to:

- Find a narrowing or scar and measure exactly where it is and how long it is
- Check the urethra after an injury
- Plan a surgery to repair the urethra
- Check how the urethra is healing after a repair

The test shows the open channel inside your urethra — the path that urine takes. It does not look at the kidneys, and it is not a treatment; it is a picture that guides what comes next.

## Is It Safe?

Yes. A RUG is a common, low-risk test. The amount of X-ray used is small, and the dye is water-based and leaves your body in your urine. Most people have only brief, mild discomfort. Uncommon side effects — a urine infection, a little bleeding, or trouble urinating for a short time — are usually mild and pass quickly.

## LEARN THE TERMS

### Urethra

The tube that carries urine from the bladder out of the body.

### Stricture

A narrow or scarred spot in the urethra that can slow or block the flow of urine.

### Contrast dye

A liquid that shows up white on X-ray so the inside of the urethra can be seen.

### Catheter

A thin, soft tube. For this test, only the very tip sits just inside the opening — it does not go all the way in.

### Fluoroscopy

A type of X-ray that shows live, moving pictures as the dye flows.

### Meatus

The opening at the tip of the penis where urine comes out.

### Urine culture

A quick test on a urine sample to check for infection before the test.

### Reconstructive urologist

A surgeon who specializes in the urinary tract and in repairing the urethra.

**WILL IT HURT?** Most people feel only brief pressure or stinging as the dye goes in, not sharp pain. The team can slow down at any time — just tell them if you are uncomfortable. The test is over in about 15–30 minutes.

## How to Get Ready (Before Your Test)

There is very little to do to prepare. In most cases:

- You can **eat and drink normally** — no need to fast unless your team tells you otherwise.
- Take your **usual medicines** unless your team asks you to stop something.
- You can usually **drive yourself home**, because no sedation is needed for most patients.

### Tell your team ahead of time if you:

- Have ever had a reaction to X-ray contrast dye or iodine
- Take a blood thinner
- Have signs of a urine infection (burning, fever, or cloudy, strong-smelling urine) — an active infection may mean the test is rescheduled

You may be asked to give a **urine sample** to check for infection, and you may be given an **antibiotic** before or after the test to lower the small risk of infection.

## What Happens During the Test

- 1 You lie on an X-ray table, usually turned slightly onto your side. The team helps you into position.
- 2 The tip of the penis is cleaned. A small, soft tube is placed **just inside the opening** — only the tip. A tiny balloon may be gently inflated to hold it in place.
- 3 The dye is slowly placed into the urethra while X-ray pictures are taken. You may be asked to hold still and breathe normally.
- 4 The team watches the dye on a screen and takes a few pictures from different angles. Then the tube is removed.

## After the Test

- You can usually go home and return to **normal activities right away**.
- You may feel **mild burning when you urinate** for a day or so. Drinking extra water helps flush it out and eases this.
- You may notice a **small amount of blood** at the tip, or a pink tinge in your urine. This is common and usually clears within a day.
- The dye leaves your body in your urine over the next several hours.

### Call your surgeon's office or seek care if you have:

- A fever or chills
- Trouble urinating, or you cannot urinate at all
- Heavy bleeding, or bleeding that will not stop
- Pain that gets worse instead of better

## THREE THINGS TO REMEMBER

1. A RUG is a quick, safe X-ray that maps the inside of your urethra with a special dye — it helps your surgeon plan the right treatment.
2. There is little to do to prepare. Eat, drink, and take your usual medicines — but tell your team about any dye allergy, blood thinners, or signs of a urine infection.
3. Most people feel only brief pressure and go home right away. Mild burning or a little blood for a day is normal — drink extra water, and call for fever, heavy bleeding, or trouble urinating.