

Retrograde Pyelogram



What is a retrograde pyelogram?

A retrograde pyelogram is an imaging test that uses X-rays to look at your bladder, ureters, and kidneys. The ureters are the long tubes that connect your kidneys to your bladder. This test is usually done during a test called cystoscopy. It uses an endoscope, which is a long, flexible, lighted tube. During a cystoscopy, the healthcare provider can inject contrast dye directly into the ureters. The contrast helps parts of the body show up more clearly on an X-ray. The exam is done using anesthesia.

Why might I need a retrograde pyelogram?

You may need a retrograde pyelogram if your healthcare provider thinks something is blocking your kidneys or ureters. It's also used to find a possible cause of blood in your urine. This may be a tumor, stone, blood clot, or narrowing (strictures). The test is also used to check the placement of a catheter or a ureteral stent. A stent is a hollow tube that lets urine pass around a blockage.

This test can typically be done even if you are allergic to contrast dye. Only a small amount of the dye is absorbed by the body. The test may also be done if you have poor kidney function.

Your healthcare provider may have other reasons to recommend a retrograde pyelogram.

What are the risks of a retrograde pyelogram?

You may want to ask your healthcare provider about the amount of radiation used during the test. Also ask about the risks as they apply to you.

Consider writing down all X-rays you get, including past scans and X-rays for other health reasons. Show this list to your provider. The risks of radiation exposure may be tied to the number of X-rays you have and the X-ray treatments you have over time.

Tell your healthcare provider if you:

- Are pregnant or think you may be. Radiation exposure during pregnancy may lead to birth defects.
- Are allergic to or sensitive to any medicines, contrast dye, or iodine. Because contrast dye is used, there is a risk for allergic reaction to the dye.
- Have kidney failure or other kidney problems. In some cases, the contrast dye can cause kidney failure. You are at higher risk for this if you take certain diabetes medicines.

Possible complications of retrograde pyelogram include:

- Sepsis
- Urinary tract infection
- Bladder tear
- Bleeding
- Nausea or vomiting

You may not be able to have this test if you are severely dehydrated.

You may have other risks depending on your specific health condition. Talk with your provider about any concerns you have before the procedure.

Certain things can make a retrograde pyelogram less accurate. These include:

- Stool or gas in your intestines
- Barium in your intestines from a past barium test

How do I get ready for a retrograde pyelogram?

- Your healthcare provider will explain the procedure to you. Ask them any questions you have about the procedure.
- You may be asked to sign a consent form that gives permission to do the procedure. Read the form carefully and ask questions if anything is not clear.
- You'll need to fast for a certain time before the procedure. Your healthcare provider will tell you how long to fast, whether for a few hours or overnight.
- Tell your healthcare provider if you are pregnant or think you may be.
- Tell your healthcare provider if you've ever had a reaction to any contrast dye, or if you're allergic to iodine.
- Tell your healthcare provider if you're sensitive to or are allergic to any medicines, latex, tape, and anesthesia.
- Tell your healthcare provider of all prescription and over-the-counter medicines and herbal supplements that you're taking.
- Tell your healthcare provider if you have a history of bleeding disorders. Also tell your provider if you're taking any anticoagulant (blood-thinning) medicines, aspirin, or other medicines that affect blood clotting. You may need to stop these medicines before the test.
- You may need to take a laxative the night before the test and have a cleansing enema or suppository a few hours before the test.
- You may get a sedative before the procedure to help you relax. Because the sedative may make you drowsy, you'll need someone to drive you home.
- Follow any other directions your provider gives you to get ready.

What happens during a retrograde pyelogram?

You may have a retrograde pyelogram as an outpatient or during a hospital stay. The way the test is done may vary depending on your condition and your healthcare provider's practices.

Generally, the retrograde pyelogram follows this process:

1. You'll be asked to remove any clothing, jewelry, or other objects that may get in the way of the test.
2. If you need to remove clothing, you'll be given a gown to wear.
3. An IV (intravenous) line will be put in your arm or hand.
4. You'll be asked to lie face up on the X-ray table and place your legs in stirrups.
5. You will get a sedative or general anesthesia in the IV before putting the endoscope in.
6. Your healthcare provider will put an endoscope through the opening in your urethra and move it into the bladder. Once the endoscope is in place, the bladder can be imaged. A thin tube (catheter) may be put into one or both ureters.
7. Your healthcare provider will inject the dye through the catheters.
8. Your healthcare provider will take a series of X-rays.
9. When the X-rays are done, the healthcare provider will remove the catheter and endoscope.

What happens after a retrograde pyelogram?

Your recovery will vary, depending on the type of procedure done and your healthcare provider's practices. After the procedure, you'll be taken to the recovery room to be watched. Once your blood pressure, pulse, and breathing are stable and you are alert, you'll be taken to your hospital room or sent home.

Your urine output will be watched closely for volume and signs of blood. It may be red from even a small amount of blood. This is normal and doesn't necessarily mean a problem. You may be told to keep watching your urine output for a day or so once you're at home.

You may have pain when you urinate. Take a pain reliever for soreness as recommended by your healthcare provider. Aspirin or certain other pain medicines may increase the chance of bleeding. Take only recommended medicine.

Call your healthcare provider right away if any of these happen:

- Fever or chills
- Redness, swelling, or bleeding or other drainage from the urinary opening
- Increased pain around the urinary opening
- Increase in the amount of blood in your urine
- Trouble urinating

Your healthcare provider may give you other directions, depending on your situation.

Next steps

Before you agree to the test or procedure make sure you know:

- The name of the test or procedure
- The reason you are having the test or procedure
- What results to expect and what they mean
- The risks and benefits of the test or procedure
- What the possible side effects or complications are
- When and where you are to have the test or procedure
- Who will do the test or procedure and what that person's qualifications are
- What would happen if you did not have the test or procedure
- Any alternative tests or procedures to think about
- When and how will you get the results
- Who to call after the test or procedure if you have questions or problems
- How much you will have to pay for the test or procedure

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