

Pyelogram

A pyelogram is a radiologic procedure that allows a healthcare professional to visualize the urinary tract, including the kidneys, bladder, and ureters. With an antegrade pyelogram, the contrast media mimics the normal flow of urine, while the contrast media in a retrograde pyelogram travels against the normal flow of urine. The procedure allows masses, obstructions, and lesions affecting the urinary tract, such as kidney stones, an enlarged prostate, or urinary tumors, to be visualized and evaluated. The contrast media used during a pyelogram is radiopaque and is used to visualize the urinary tract on x-ray. Because the contrast media used in this procedure is nephrotoxic, it should not be used in patients with decreased renal function or severely dehydrated. In addition, patients should be screened for shellfish and iodine allergies prior to the procedure, as those who have shellfish allergies may experience an anaphylactic reaction when given iodine-containing contrast media. Patients should be encouraged to increase fluid intake, if appropriate, after the procedure in an effort to rid the body of the remaining contrast media.



PLAY PICMONIC

Indications

Visualizes Urinary Tract

Visual of the Urinary Tract

A pyelogram allows a healthcare professional to visualize the urinary tract, including the kidneys, bladder, and ureters.

Diagnose Urinary Disorders

Diagnostic-computer with Urine Disorder

A pyelogram can be performed to identify and diagnose disorders of the urinary tract. This procedure allows masses, obstructions, and lesions affecting the urinary tract, such as kidney stones, an enlarged prostate, or urinary tumors, to be visualized and evaluated.

Considerations

Bowel Prep (Enema)

Bowel-bowl washing

An enema is administered the evening prior to procedure in order to rid the bowel of any remaining gas or feces, as they may obscure visualization of the renal system. This can also be called a bowel prep. Keep in mind that radiologic studies using barium, such as a barium enema, should be scheduled after an IVP.

IV Contrast Media

Contrast IVy

When contrast media is administered, the patient may experience flushing of the face and a salty taste in his/her mouth. The contrast media is used to visualize the urinary tract on x-ray.

X-Ray (Radiopaque)

X-ray

An x-ray is taken to visualize the urinary tract. The contrast media is radiopaque, meaning that it shows up opaque, or white, on an x-ray.

Increase Fluid Intake

Up-arrow Fluid Intake

Patients should be encouraged to increase fluid intake, if appropriate, after the procedure, in an effort to rid the body of the remaining contrast media.

Contraindications

Iodine Allergy

Iodine-bottle with Allergy-alligator

Patients should be screened for any allergies prior to the procedure. Patients who have shellfish or iodine allergies may experience an anaphylactic reaction when given iodine-containing contrast media.

Decreased Renal Function

Down-arrow Kidney

Patients with decreased renal function should not be given intravenous contrast media, as this substance is toxic to the kidneys and may worsen kidney function.