Hematuria or Blood in Urine



Hematuria is blood in the urine. It may be visible or microscopic. It can be caused by a bleeding disorder or certain medications, or by stones, infection, or tumor. It may be due to injury to the kidneys, urinary tract, prostate, or genitals. Having blood in your urine doesn't always mean you have a medical problem. However, you should contact your doctor right away, especially if you have nausea, vomiting, pain or difficulty urinating.

Your doctor will examine you for signs of injury. The doctor may also use x-ray, MR/CT urography, abdominal ultrasound, or intravenous pyelogram (IVP) to diagnose you. Treatment will focus on the underlying cause of blood in your urine.

What is hematuria?

Hematuria is blood in the urine. It may be:

- Macroscopic: blood is visible in the urine, which may look red or brown. Sometimes, clots (http://www.radiologyinfo.org) can be found in the blood.
- Microscopic: blood is only visible under a microscope. A urine test will usually detect it.

Stones, infection, tumor, or injury to the kidneys, urinary tract, prostate gland and/or genitals may cause blood in the urine. Bleeding disorders or certain medications also may cause it.

If you find blood in your urine, contact your doctor right away. It is especially important to do so if you have nausea, vomiting, pain or difficulty urinating.

How is hematuria diagnosed and evaluated?

Having blood in your urine does not necessarily mean you have a medical problem. It may be caused by routine activities such as vigorous exercise. However, because it can sometimes involve a serious condition, you should contact your doctor right away.

Your doctor will review your medical history. A physical exam will check for bruising and other signs of injury. If you are male, your doctor may use a digital rectal exam to see if your prostate is causing the hematuria. Tell your doctor about any medications you're taking, including vitamins or supplements.

Your doctor may use one or more of the following exams to assess your condition:

- X-ray (http://www.radiologyinfo.org) : Your doctor may use abdominal x-ray to look for stones (https://www.radiologyinfo.org/en/info/stones-renal) , especially if you have nausea and vomiting. An x-ray will not detect most causes of hematuria. Other exams will likely be needed.
- MR/CT Urography (https://www.radiologyinfo.org/en/info/urography) *:* Your doctor may use CT or MR urography to

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examine your urinary tract, bladder, ureters, and kidneys.

- *Abdominal ultrasound (https://www.radiologyinfo.org/en/info/abdominus) :* Your doctor may use ultrasound to examine your kidneys and bladder for potential causes of blood in your urine.
- *Intravenous pyelogram (IVP) (https://www.radiologyinfo.org/en/info/ivp) :* An IVP x-ray exam helps your doctor visualize your kidneys, bladder (http://www.radiologyinfo.org) and ureters (http://www.radiologyinfo.org) . It can help detect urinary system abnormalities and show how efficiently your system works. This exam requires an injection of contrast material.
- *MRI of the prostate (https://www.radiologyinfo.org/en/info/mr_prostate) :* If you are male, your prostate may be causing your condition. If so, your doctor may assess your prostate and seminal vesicles using MRI.

How is hematuria treated?

Treatment will focus on the underlying cause of blood in your urine.

If stones are the cause, you may need surgery. If your doctor suspects a tumor in the urinary tract or prostate gland, you may need a biopsy. Possible tumor treatments may include chemotherapy (http://www.radiologyinfo.org) , surgery or radiation therapy. (http://www.radiologyinfo.org)

Which test, procedure or treatment is best for me?

- *Hematuria (https://www.radiologyinfo.org/en/info/acs-hematuria)*
- *Hematuria-Child (https://www.radiologyinfo.org/en/info/acs-hematuria-child)*
- *Lower Urinary Tract Symptoms-Suspicion of Benign Prostatic Hyperplasia (https://www.radiologyinfo.org/en/info/acs-lower-urinary-tract-symptoms)*

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