What is Hematuria?

Hematuria is blood in the urine. When the urine is red or pink could be linked to blood in the urine and is called “gross” or “visible” hematuria. Sometimes, blood is in the urine but is not easily seen and it is called “microscopic” hematuria since it can only be seen under a microscope.

During routine visits to your health care provider, you are often asked to give a urine sample for testing. Blood might be found either using a chemical strip (called a dipstick) or under a microscope. If blood is detected in these ways, then you may have “microscopic hematuria.”

What Causes Hematuria?

There are many causes for blood in the urine. Most are not of worry, but some may call for care by your health care provider. Common causes for blood in urine include:

- Urinary infection
- Enlarged prostate in older men
- Kidney or bladder stones
- Period in women
- Prostate infection
- Kidney disease
- Kidney trauma
- Bladder cancer (mostly in smokers)
- Kidney cancer
- Cancer of the lining of the urinary tract
- Anti-swelling drugs (joint swelling and pain pills)
- Tough workout
- Smoking history
- Age
- Gender

There are many causes for blood in the urine. Most are not of worry, but some may call for care by your health care provider. Common causes for blood in urine include:

When blood is found in the urine, health care providers want to make sure there is not a major health issue, such as a tumor in the kidney, urinary tract or bladder. Urological cancers are rarely the cause of blood in the urine but can be life threatening.

How is Hematuria Diagnosed?

Your doctor will want to look for causes of the blood in your urine. This often involves an exam and learning your full health record to see if you have risks for cancer. The doctor will also be looking for non-cancer causes for blood in your urine, such as recent trauma, a urinary tract infection (UTI) or other procedures.

Your doctor will arrange any tests needed. If nothing is found to explain the blood in the urine, then your doctor may assess your level of risk for cancer as low, intermediate or high. These levels of risk are based on known risks for bladder cancer such as:
• Symptoms
• Number of red blood cells in the urine
• Certain types of chemotherapy
• Family history of bladder cancer, cancer of the urinary tract lining, or Lynch Syndrome
• Workplace exposures to chemicals such as benzene or aromatic amines
• Having a catheter in your urinary tract for long amounts of time

How is Hematuria Tested?
Doctors use guidelines about risks to decide what kind of testing is needed for each person. A person at low risk may be able to avoid a lot of testing since their risk for cancer is low. A person at high risk needs a more in-depth testing.

Low Risk Testing. Since patients at low risk rarely have cancer, doctors will likely discuss the benefits and drawbacks of more testing. A common option is to repeat a urine test within 6 months. If that test shows blood in the urine, then more testing is performed. If the repeat test does not show blood, then the patient is simply watched for symptoms.

Intermediate Risk Testing. Patients who are told they have an intermediate risk will be recommended to have a cystoscopy procedure to look at the bladder and a renal ultrasound to look at the kidneys.

High Risk Testing. Those who are at high risk often have a test with a cystoscope to look at the bladder and a computed tomography (CT scan) of the abdomen and pelvis to look at the lining of the urinary tract. The main difference between a CT scan and ultrasound is that the CT scan can find small abnormalities in the kidney and ureters that may be missed by ultrasound.

How is Hematuria Treated?
Most patients with blood in the urine do not have major problems. In fact, for many, a cause is not known. In those patients with a more serious condition, finding this early can be lifesaving. It is of great value to get tested and not ignore these findings especially if blood is seen in your urine.

About the Urology Care Foundation
The Urology Care Foundation is the world’s leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts. To learn more, visit the Urology Care Foundation’s website, UrologyHealth.org/UrologicConditions or go to UrologyHealth.org/FindAUrologist to find a doctor near you.

Disclaimer:
This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologists or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications. For copies of printed and other urologic conditions, visit UrologyHealth.org/Order or call 800-828-7866.