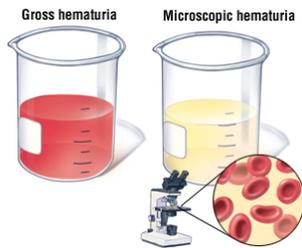


# Microhematuria

## What is Microhematuria?

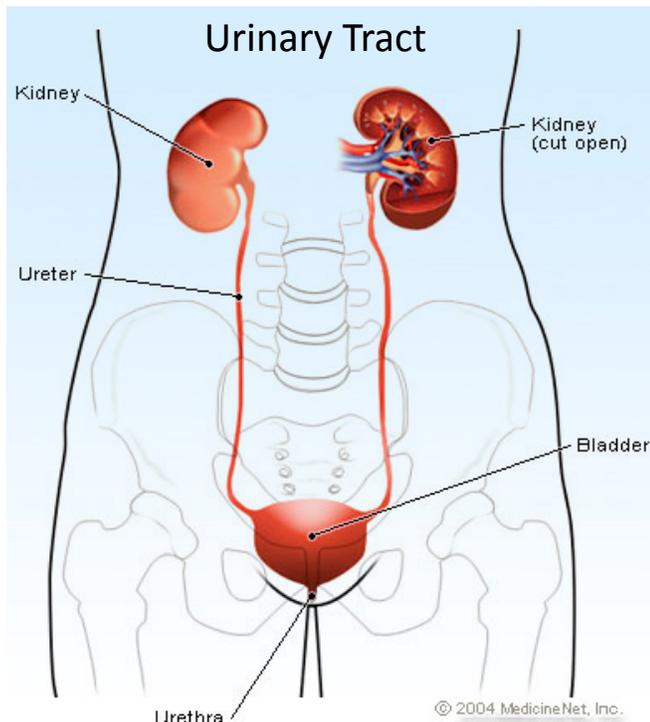
Hematuria is a medical condition in which blood is present in the urine.

Gross hematuria refers to larger amounts of blood in the urine so that the color of the urine is red or brown. Microscopic hematuria is usually not associated with any symptoms. It is commonly detected at check-ups by primary-care physicians, often by a chemical test strip.



Microhematuria is an amount of blood in the urine that is so small it can only be seen under a microscope. In fact, the medical definition presented by the American Urologic Association (AUA) is “three or more red blood cells per microscopic field from two of three urinalysis specimens”. The urine color remains unchanged because the quantity of blood is so small.

Hematuria may result from bleeding anywhere along the urinary tract, from the kidneys, ureter, bladder or urethra.



## What Causes Microhematuria?

There are multiple causes of microhematuria. When it's accompanied with pain it can be due to recent trauma, infections, or stones in the kidney or bladder. It is estimated that up to 10% of normal healthy people may occasionally have a small amount of microscopic blood in the urine.

Painless hematuria can be due to a number of conditions, ranging from minor findings that do not require treatment to significant findings such as bladder cancer or kidney cancer.

Medications that affect the clotting of blood, such as non-steroidal anti-inflammatories (Nsaids), aspirin, Coumadin or Plavix may also lead to hematuria.

## How is Microhematuria Diagnosed?

Once microhematuria is found, your doctor will go over your medical history and perform a physical exam, focusing on possible causes of blood in the urine. There are three additional diagnostic studies that may be performed to determine the source.

Cystoscopy is a visual exam of the bladder performed by passing a scope thru the urethra to examine the bladder.

Computed tomography (CT scan) is an x-ray procedure that produces cross-sectional pictures of the body. A special dye called a contrast will be given by vein to highlight the urinary tract. Be sure to let the doctor know if you are allergic to iodine or if you think you have renal insufficiency.

Urine cytology is a test that looks for abnormal cells in the urine.

## How is Microhematuria Treated?

Treatment varies widely depending on the cause. Your doctor will guide you with decisions that may be necessary to address the problem.

It is important to note that sometimes the source of the microhematuria may not be found. A thorough evaluation can rule out the most serious causes of blood in the urine.

A common cause of asymptomatic hematuria that requires no treatment is benign familial microhematuria. Often many members of the same family will be affected. This diagnosis poses no risks to the kidneys as they maintain normal function.