

Blood in the urine

What is haematuria?

Haematuria (heem-a-turia) means that there is blood in your urine (wee). A high number of red blood cells in your urine can cause the urine colour to change to pink, red or brown. There can be many reasons for blood in your urine - some causes are harmless while others are a sign of a more serious illness.

Macroscopic haematuria or gross haematuria means that you can see the blood in your urine.

Microscopic haematuria means the amount of blood in your urine is too little to see. A urinalysis is a special type of urine test that can detect blood in the urine, even when you cannot see it.

What causes blood in the urine?

- **Exercise or sex:** may cause temporary stress to the kidneys causing short-lasting symptoms.
- **Urinary tract infection (UTI):** where bacteria (germs) infect the bladder, kidneys or urethra and cause damage. Signs include burning or painful urination.
- **Kidney stones:** these can block urine flow and cause strong pains.
- **Kidney disease:** any kidney disease that causes inflammation or swelling of the nephrons (kidneys filtering units) can cause blood to leak into the urine. These conditions include glomerulonephritis, IgA nephropathy and some inherited kidney diseases such as Alport syndrome or polycystic kidney disease.
- **Enlarged prostate:** is common in older men and may cause problems starting and finishing urination.
- **Cancer:** in the bladder, kidney, or prostate.
- **Having a period:** blood can mix with your urine when you are on your period.



How will I know if there is blood in my urine?

Depending on the cause of your haematuria, you may not have any symptoms or you may see change in the colour of your urine. If your urine changes to red or brown and you suspect blood in your urine, call your doctor straight away. Your doctor will order a urine test to find out if there is blood in your urine.

Finding the cause for blood in urine

It is important for your doctor to look for the cause of the blood in the urine. Your doctor will ask you about your health and symptoms and perform a medical exam looking for risk factors for infection, kidney disease, or cancer.

Urine tests:

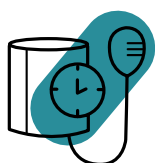
A urine test tells the doctor if blood is in the urine and how much there is.

- **Urine dipstick:** a quick test that is often done at the doctor's office. If your urine dipstick is positive for blood, the doctor will often order a urinalysis.
- **Urinalysis:** a urine test sent away to a lab to test for red blood cells, bacteria, and protein in the urine. A urinalysis is a more accurate test and helps your doctor identify the cause of haematuria.

Red, orange, or brown urine is not always caused by blood.

Certain medicines, foods and artificial food colorings, and conditions like dehydration can change the urine's color. Your doctor or pharmacist will alert you if you're on medications that can change the colour of your urine.

Your doctor may order further tests such as:



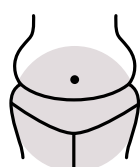
A blood pressure check - high blood pressure is common with glomerulonephritis.



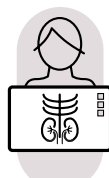
Blood tests - checks for signs of infection or cancer.



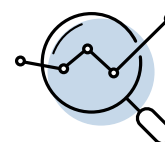
A urine cytology - a urine test to find abnormal cells in your urine.



A physical examination of abdominal or genital areas - to look and feel for signs of infection or enlarged organs or tumours.



A urinary tract computed tomography scan (CT scan) or ultrasound - an imaging test to look for tumours or structure problems.



Further tests - a cystoscopy to look inside the bladder or a kidney biopsy to check the kidney tissue for ongoing haematuria.

Collecting urine for urine tests

A urinalysis tests a sample of urine to look for bacteria, blood cells, and proteins. A urine cytology test involves looking at the urine under a microscope to see any abnormal cells. Both tests require a urine sample.

You will be given clear instructions to collect a urine sample. These include:

- **How to collect the sample:** including tips like washing your hands or using a sterile wipe.
- **The type of container to use:** typically, you will get a specimen cup.
- **The time of the day to collect the sample:** usually first thing in the morning.
- **What part of the urine stream to collect:** the start, midstream, or all of it.



Is it treatable?

Finding blood in the urine can be worrying, but most causes are treatable. Haematuria caused by injury or exercise may heal on its own. Sometimes your doctor cannot find a cause and will recommend regular check-ups to make sure your haematuria does not get worse.

For infections, your doctor will prescribe medications to treat the underlying cause. You may be referred to a nephrologist if haematuria is due to kidney disease. A urologist can help treat kidney stones, bladder cancer, or structural causes of haematuria.

Call your doctor as soon as possible if you notice blood in your urine. Finding the cause early leads to faster treatment and better results.



Things to remember:

- ✓ **Haematuria is blood in your urine. Call your doctor if you notice your urine turns a pink, reddish or brown color.**
- ✓ **A urinalysis helps to diagnose haematuria. Your doctor may do other tests and ask about your health to identify the cause.**
- ✓ **Some causes of haematuria heal on their own, but others can be serious and need treatment - early detection is important!**

What does that word mean?

Alport syndrome – A genetic kidney disease which affects your kidneys, hearing and eyesight.

Cystoscopy – An investigation where a special viewing camera is inserted via the urethra into the bladder.

Dehydration – When you do not have enough fluids in your body. If dehydration is severe, it can cause serious problems and you may need to go to hospital.

Glomerulonephritis – A type of kidney disease that damages the tiny filters in the kidneys. It is sometimes called nephritis.

IgA nephropathy – A common type of glomerulonephritis where build-up of the IgA antibody damages the kidney filters, allowing protein and blood to leak into the urine.

Kidney biopsy – A small piece of tissue is removed for testing and examination under a microscope.

Nephrologist – A doctor who specialises in treating conditions of the kidney.

Tumour – An abnormal growth of tissue on or in the body. A tumour may be benign or malignant. Other words that may be used include growth, neoplasm, lump, mass, or shadow.

Urethra – The tube that takes urine out of the body from the bladder.

Urine – The name for excess fluid and waste products that are removed from the body by the kidneys. Commonly called wee.

Urine cytology – When the cells from a sample of urine are examined to identify any abnormal characteristics.

Urologist – A doctor who specialises in treating issues with the urinary tract or bladder.

Special Thanks! This educational resource is supported by a sponsorship provided by Boehringer Ingelheim



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kidney.org.au

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