



**University
Hospitals Sussex**
NHS Foundation Trust

Kidney Stones

Accident and emergency

Patient information

What are kidney stones?

Kidney stones are small, hard lumps that form in the urinary tract.

They can appear in:

- The kidneys
- The ureters (tubes connecting kidneys to the bladder)
- The bladder.

They vary in size and shape. Many are made of calcium, a natural substance in the body.

Some stones cause no symptoms and pass without you noticing. Others can cause pain and blood in the urine.

About half of people who have a kidney stone develop another one later in their life. Drinking plenty of water each day may prevent a recurrence.

What are the symptoms of kidney stones?

Not everyone with a kidney stone has symptoms.

When symptoms do occur, they may include:

- **Flank pain:** pain on one side of your back or side, near the kidney.
- **Renal colic:** severe, cramping pain that comes and goes. It may travel to the groin. This is caused by a stone moving down the ureter.
- **Blood in urine:** your urine may appear red or pink if the stone irritates the urinary tract.
- **Infection:** signs include fever, burning pain when passing urine, and needing to urinate more often.

What tests might I have?

- **Blood tests:** to check kidney function and signs of infection.
- **Urine test:** to detect infection or blood in the urine.
- **CT scan (non-contrast):** to find out the size and location of the stone.

How are they treated?

Small Stones (less than 5mm)

Small stones often pass on their own. To help this happen:

- Drink plenty of fluids to keep urine flowing.
- Take painkillers as needed (you may be prescribed strong ones).
- You may be given Tamsulosin, a medication that helps relax the ureter and pass the stone more easily.

Larger or stuck stones

If the stone is too big to pass or causes ongoing problems, further treatment may be needed:

- **Shockwave Lithotripsy (ESWL)**

Uses focused shockwaves from outside the body to break the stone into smaller pieces, which pass in your urine.

- **Ureteroscopy**

A thin tube is passed into the bladder and ureter under x-ray guidance. The stone is broken using a laser or probe and removed.

A stent may be placed to keep the ureter open.

This procedure is done under general anaesthetic.

- **Percutaneous Nephrolithotomy (PCNL)**

Used for large stones. A small cut is made in your back and a scope is passed into the kidney. The stone is either removed whole or broken up using a laser.

Follow-up care

In some cases, you may be referred to the Stone Clinic (also called the Renal Colic Clinic). This usually happens if:

- You have had kidney stones before.
- Your symptoms persist.
- Your stone is larger or causing complications.

The clinic will contact you to arrange an appointment. If you do not hear from them, call the Booking Hub at **0300 303 8360**.

For questions after you've been contacted by the clinic, call the Virtual Stone Clinic at extension **67752** (available 9am–4pm, Monday to Thursday).

When to seek urgent medical help

Contact a doctor or return to the Emergency Department immediately if:

- Your pain gets worse or is not controlled by medication
- You are unable to pass urine
- You develop a fever or feel unwell.

If you still have symptoms after 48 hours after discharge, please return to the Emergency Department for a review.

Further support

For general medical advice please use the NHS website, the NHS 111 service, walk-in-centres, or your GP.

The **NHS website** www.nhs.uk/ provides online health information and guidance

There are walk-in and urgent treatment services at Brighton Station, Crawley Urgent Treatment Centre, Lewes Victoria Hospital, Horsham Minor Injuries Unit and Bognor Regis War Memorial Hospital.

This article is intended for patients receiving care in Brighton & Hove or Haywards Heath.

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