



The Dudley Group  
NHS Foundation Trust

# Suspected Renal colic due to renal / kidney stones

**Emergency Department**  
Patient Information Leaflet

# Introduction

We suspect you may have renal colic due to kidney stones. Renal colic is a type of pain you get from your urinary tract (kidneys, ureters, bladder, urethra). This can be from kidney stones or an infection.

Stones can form in any part of your urinary tract. Stones are formed from minerals like calcium and uric acid which are normally excreted in your urine. Occasionally, these minerals can form into crystals / stones. Stones can be as small as a grain of sand or as large as a marble.

# Symptoms

Often people will have kidney stones with no symptoms. Renal colic usually occurs when a stone moves into the ureter (tube between your kidney and bladder). This stretches the ureter, causing pain.

### **Common symptoms are:**

- Severe pain that comes in waves, usually from your flank / side. This can last between 20 minutes and one hour.
- This pain may radiate into your groin and testicles.
- Blood in the urine.
- Sickness and / or vomiting.
- Sweating.

### **Other symptoms of urinary stones include:**

- Smelly urine.
- Gravel / sand in your urine.
- A frequent sensation to pass water.
- Pain when passing urine.
- Fever and chills (if you have an infection).

## Causes of renal / kidney stones

About six per cent of women and 12 per cent of men will develop a renal stone in their lifetime.

Certain things may increase your risk of developing renal stones. These are:

- Eating a high-protein, low-fibre diet.
- Being inactive or bed-bound.
- Having a family history of kidney stones.
- Previous history of kidney or urinary infections.
- Previous history of kidney stones, particularly if it was before you were 25 years old.
- Certain medication.

## Managing pain in renal colic

The majority of stones will pass in your urine over the next few days and do not require any further treatment. Whilst this happens, your pain can be managed with simple painkillers e.g. paracetamol / co-codamol (never both together) or a non-steroidal anti-inflammatory drug (such as ibuprofen / naproxen / diclofenac). Occasionally, simple painkillers are not enough and you may need to be admitted to the hospital to be treated with stronger medication e.g. morphine.

## Diagnosing kidney stones

You will require a blood test to ensure your kidneys are working well. You will also have a bedside urine test to look for blood and to ensure that you have no signs of an infection.

A scan called a computerised tomography (CT) scan will be used to scan your urinary tract to look for any evidence of a stone. This is the best scan for picking up kidney stones. The CT scan is a low risk procedure involving a low dose of radiation. You will feel no ill effects from the scan. Once we have the scan results, we can plan what further treatment you require.

On occasion, you may have already passed the stone by the time the scan is done. In this case, the scan may be normal unless there is more than one stone. Occasionally, this scan may also identify other abnormalities.

Please inform the doctor / radiographer if you suspect you may be pregnant.

## Treating kidney stones

The majority of stones, especially small stones, will pass in your urine over the next few days and do not require any further treatment.

If you fail to pass the stone or have a larger stone, you may require further treatment. Your doctor may need to do one of the following procedures to remove it:

- **Extracorporeal shock wave lithotripsy (ESWL):** shock waves are used to break up the large stones into smaller stones so that you can pass them in your urine.
- **Ureteroscopy:** a camera is passed through your urethra and bladder to remove the stone.
- **Percutaneous nephrolithotomy:** keyhole surgery to remove the stone through a small cut in your back whilst you are kept asleep.

## Complications of kidney stones

Rarely, you can develop urinary tract infections or kidney damage.

50% of people will develop further kidney stones within 5 years. You can take the below steps to reduce your risk.

## Reducing your risk

You can reduce your risk of developing kidney stones by:

- Drinking at least eight to 10 glasses of water a day. Please do not drink in excess of this as too much water can also be dangerous to you.
- Reducing fizzy drinks that contain phosphoric acid.
- Reducing the amount of salt in your diet.
- Reducing foods with animal protein, such as red meat, fish and eggs.
- Reducing foods which are high in oxalate (one of the minerals in stones) such as spinach, nuts and rhubarb.

Your doctor might also prescribe tablets to prevent further stones from forming.

## What happens next?

We suspect you may have renal / kidney stones.

Once your pain has eased and is under control, all further investigations can be done as an outpatient.

### **1. Painkillers**

The doctor will give you some painkillers to take home. Please ensure that these are taken as directed.

### **2. CT scan**

The doctor will arrange for you to have a CT scan.

This has been arranged for \_\_\_\_\_am on  
\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_.

This scan will be done in the Imaging (Main X-ray) Department, Ground Floor, Russells Hall Hospital.

### **3. Preparing for your scan**

Please arrive at least 30 minutes before your allocated scan time.

Please remove any piercings you have that are between your shoulders and knees as these create artefacts on the CT scan.

Please inform the doctor / radiographer if you suspect you may be pregnant.

On arrival, you will be asked to undress and put on a hospital gown. You will then lay on a bed that will take you through the scanner. You will feel no pain or side effects during the scan.

If you cannot attend your scan appointment, please call 01384 456111 ext. 2327 to rearrange the scan.

### **4. After the CT scan**

Once the scan is completed, please go to B5 / Emergency Surgical Hub (2<sup>nd</sup> Floor) at 10am.

Please inform the nurse in charge that you are on the **Renal colic pathway**.

According to what your scan shows, you will be seen by the most appropriate specialist.

## For more information

Please visit the following website if you require more information:

<https://www.nhs.uk/conditions/kidney-stones/>



If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

Russells Hall Hospital switchboard number: 01384 456111

**This leaflet can be downloaded or printed from:**

<http://dgft.nhs.uk/services-and-wards/accident-emergency/>

If you have any feedback on this patient information leaflet, please email [dgft.patient.information@nhs.net](mailto:dgft.patient.information@nhs.net)

**This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.**

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此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

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Aceasta broșura poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru va rugăm sunați la 0800 073 0510.

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