

April 2022

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Your Health

Kidney Stones

Featuring

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Consultant Urological Surgeon



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Consultant Urological Surgeon
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He is a Consultant Urological Surgeon currently working in the Northwest London region with over 20 years of experience. He is a highly qualified doctor graduated from Imperial College London (University of London) in 1999. He then underwent his medical training at the Charing Cross & Westminster Medical School, prior to starting out on his research journey at the National Hospital for Neurology and Neurosurgery.

With one of his special interests being kidney stones, he has kindly supervised this month's issue.

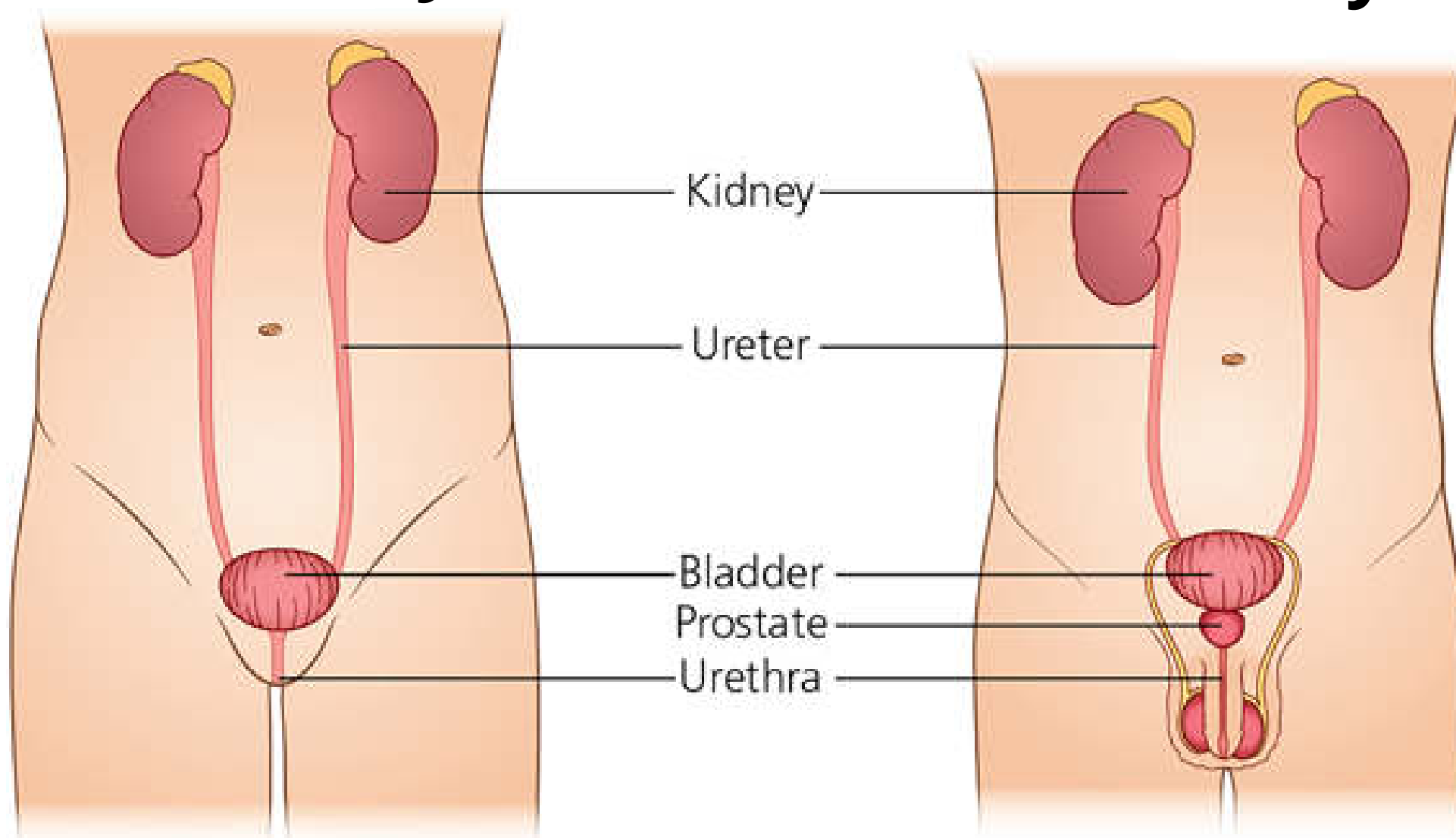
Kidney stones are hard deposits made of minerals and salts that form inside your kidneys. They are produced from chemicals which have formed into crystals in concentrated urine; the crystals can enlarge over time.

They're quite common, with more than 1 in 10 people affected. They are particularly common in Gujarat, with some of the world most eminent stone surgeons being from Gujarat.

Kidney stones form in the renal calyces (an area inside the kidney) and then can move to the renal pelvis or the ureter (the tube that connects the kidneys to your bladder). They can be extremely painful, can lead to kidney infections or the kidney not working properly if left untreated. In extreme cases, the infection can be life threatening.

Female urinary tract

Male urinary tract

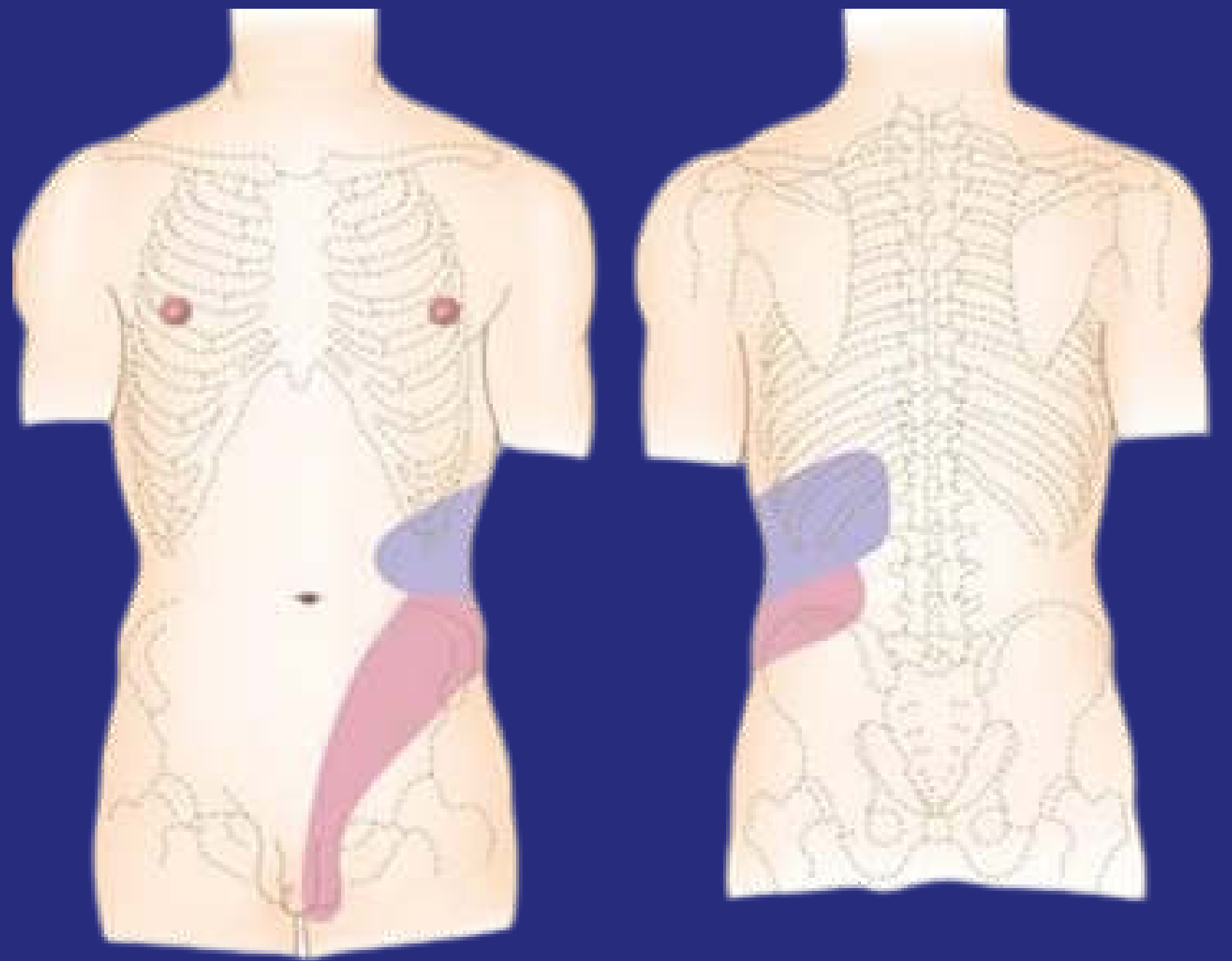


What are the common symptoms?

Very small kidney stones (up to 3mm) are unlikely to cause many symptoms. They may even go undetected and pass out painlessly when you pee.

Larger kidney stones (more than 4mm) can cause symptoms, including:

- Pain in the side of your tummy (abdomen) or groin – men may have pain in their testicles
- A high temperature
- Feeling sweaty
- severe pain that comes and goes – known as colic – it can travel from your side all the way to your groin. (See picture)
- Feeling sick or vomiting
- Blood in your urine
- Urine infection
- Feeling the need to urinate constantly



Types of kidney stones

Kidney stones come in a variety of sizes, shapes and colours. Some are like grains of sand, while in rare cases others can grow to the size of a golf ball.

The main types of kidney stones are:



Calcium stones - the most common type of stone.



Struvite stones - usually caused by an infection, like a urine infection.



Uric acid stones - usually caused by a large amount of acid in your urine.

What are the causes?

Waste products in the blood can occasionally form crystals that collect inside the kidneys. Over time, the crystals may build up to form a hard stone-like lump.

This is more likely to happen if you:

- Do not drink enough fluids
- Are taking some types of medication
- Have a medical condition that raises the levels of certain substances in your urine

Risk factors

There are things that can increase your chances of getting kidney stones, these are known as risk factors, they include:

- Family or personal history. If someone in your family has had kidney stones, you're more likely to develop stones, too. If you've already had one or more kidney stones, you're at increased risk of developing another.
- Dehydration. Not drinking enough water each day can increase your risk of kidney stones. People who live in warm, dry climates and those who sweat a lot may be at higher risk than others.
- Certain diets. Eating a diet that's high in protein, sodium (salt) and sugar may increase your risk of some types of kidney stones. This is especially true with a high-sodium diet. Too much salt in your diet increases the amount of calcium your kidneys must filter and significantly increases your risk of kidney stones.
- Obesity. High body mass index (BMI), large waist size and weight gain have been linked to an increased risk of kidney stones.

What are the options if I have a stone?

The options for patients with stone will depend on many factors, such as symptoms, age, fitness for procedures, size of patient.

Small stones (less than 4mm) will generally not need any intervention, unless they are stuck in the ureter. Larger stones, may be considered for external shock wave lithotripsy (giving shocks to stone with a special machine), ureteroscopy and LASER (going up with a camera via the water pipe under an anaesthetic and breaking and removing the stone) or PCNL (directly going into the kidney and breaking the stone).

If you do have kidney stones you will be referred to a urologist who will be able to answer questions in more detail and decide which procedure is most suitable for you.

What can we do to prevent or reduce our chances of getting kidney stones?

For those who do not suffer from this or who have had their stones removed, there are ways you can reduce your chances from getting kidney stones or having repeat episodes.

- The most important measure is to increase your daily fluid intake! There is no need to drink expensive bottled water: tap water is just as good.
- Reducing your salt intake
- Reducing your intake of animal protein (especially meat)
- Reducing the amount of refined sugar in your diet

We hope this has helped!
Tame 100 varus na sukhi thav - May you live
happily to 100 years!

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Your Health



Written by Dr Devan Thanki

