



ask the experts

## Signs that you may have kidney stones

Symptoms of this condition could include pain from the loin to groin, says Mount Alvernia consultant urologist Tricia Kuo

If you have ever been told to drink more water to prevent kidney stones, you should heed that advice. Dehydration, a high-sodium diet, metabolic syndrome and an excessive intake of vitamin C supplements have been known to cause kidney and ureteral stones, says Mount Alvernia Hospital consultant urologist Tricia Kuo. Here, she shares more about treatment options and when you should see a doctor to manage the condition.

## How are kidney stones formed and why does this happen?

Kidney stones are common and every person has about a 5 to 10 per cent chance of developing them in their lifetime. Stones are formed when there is an imbalance of chemicals in the urine. Typically, highly concentrated urine leads to clusters of crystals that form minerals or salts within the central passageways of the kidney. These become hard solid masses, particularly if they increase in size. Stones can be classified by their underlying cause: non-infectionrelated, infection-related, genetic or medicationinduced. This classification is useful as it alludes to some of the reasons as to why these stones form.

## **Q** What symptoms will kidney stones cause and when should I see a doctor?

People often associate kidney and ureteral stones with pain. However, symptoms can vary from severe pain to no pain at all, depending on the stone characteristics, such as the size, shape and location in the urinary tract. Some possible symptoms include pain from the "loin to groin". This could be due to the stone obstructing the urine passage and is an emergency situation. Along with the pain, you could also have other symptoms like nausea, vomiting, blood in the urine, fever and chills.

Less common symptoms include dull pain or intermittent flank pain that worsens with passing



If you feel a tenderness in your side and groin area, along with symptoms like blood in your urine, do visit a medical professional for further examination. **PHOTO: GETTY IMAGES** 

urine. The pain may occasionally be in your genitalia and stones in the lower ureter may cause painful urination or the sudden urge to pass urine. If pain is severe, visit the accident and emergency department immediately.

## What are the treatment options for kidney stones?

Treatment is a decision between the doctor and patient, with the following important factors to consider:

- Symptoms and their severity
- Whether there are complications like kidney infections
- Body features like obesity and any other medical conditions
- Location, characteristics and number of stones
- Fitness for anaesthesia

In general, there are both non-invasive treatments and invasive procedures like surgery, depending on the patient's condition. Commonly used surgical procedures that are minimally invasive include ureteroscopy or retrograde intrarenal surgery with laser lithotripsy. This is where a flexible scope is inserted through the urinary tract to locate stones, which are then broken down by laser so they can be easily passed out or removed. Other treatment methods could involve lifestyle and dietary changes, as well as medication to relax the ureter muscles.



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