

Kidney Stones

What is a kidney stone?

Kidney stones form in the urinary system when the water and waste in urine are out of balance. When this happens, certain types of waste crystals separate from the urine. The crystals build up and form kidney stones. Kidney stones can be made of uric acid, calcium, phosphate, or oxalate crystals.

Risk factors

- Low water intake
- Foods that are high in oxalate include nuts, chocolate, coffee, and green leafy vegetables.
- Certain medicines such as diuretics, steroids, and antacids.
- family history of kidney stones
- Born with a kidney or bowel disorder, or have other medical problems such as gout.

Signs and symptoms

- Pain in the middle of back that moves across to side
- Nausea and vomiting
- Urge to urinate often, burning feeling when urinate, or pink or red urine
- Tenderness in lower back, side, or stomach

Diagnosis

- Urine tests
- Blood tests show how well kidneys are working. They may also be used to check the levels of calcium or uric acid in blood.
- A noncontrast helical CT scan
- X-rays
- An abdominal ultrasound

Treatment

- NSAIDs, such as ibuprofen, help decrease swelling, pain, and fever. NSAIDs can cause stomach bleeding or kidney problems in certain people.
- diuretics
- Medicines to balance electrolytes may be needed.
- A procedure or surgery to remove the kidney stones may be needed if they do not pass on their own. treatment will depend on the size and location of kidney stones.

Clinical teaching

- Drink plenty of liquids.
- Strain urine every time person go to the bathroom.
- Exercise regularly.
- Avoid stone-forming foods: Beets, chocolate, spinach, tea, and most nuts are rich in oxalate are rich in phosphate, both of which can contribute to kidney stones.