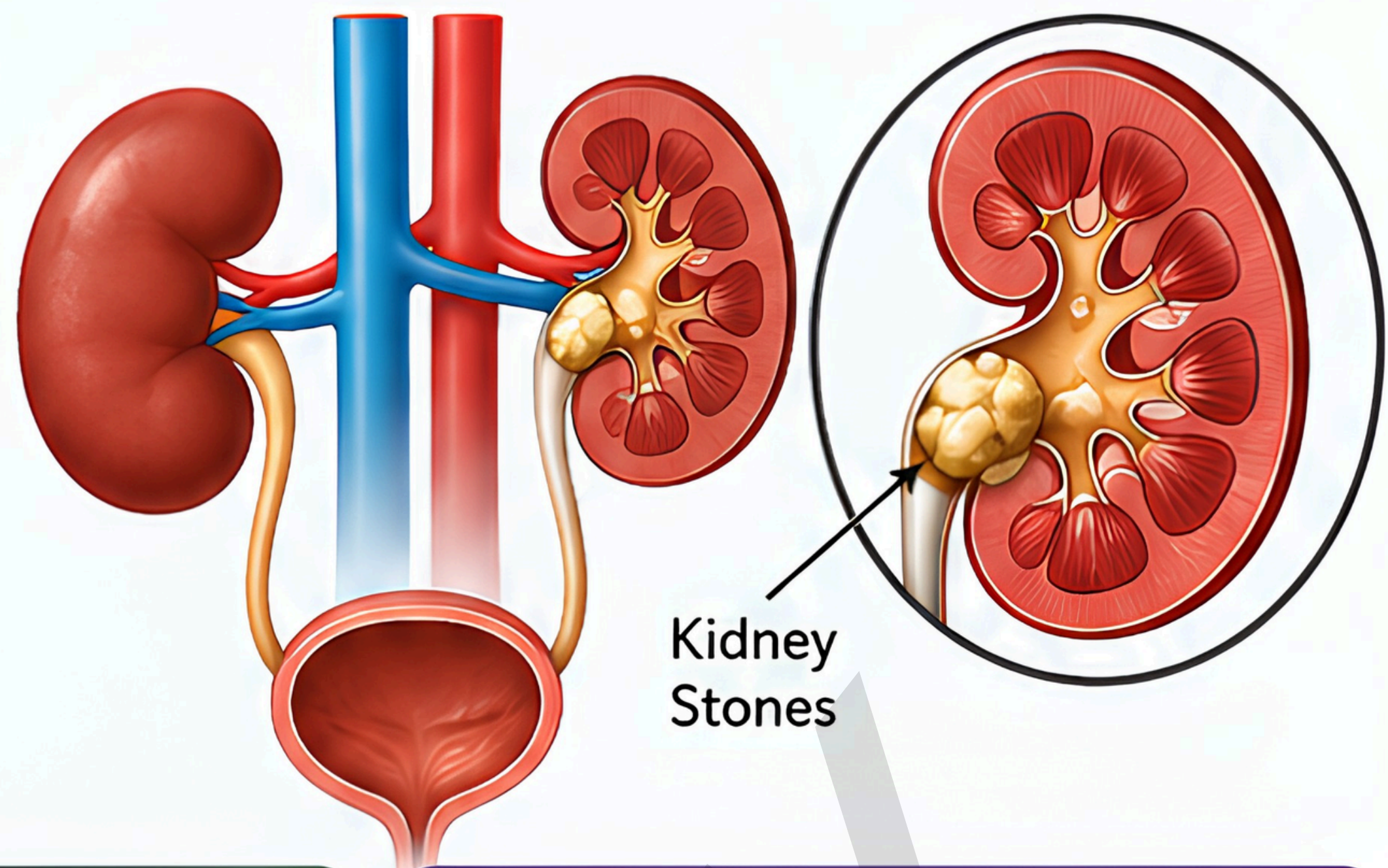


PATIENT EDUCATION CONTENT

Kidney Stones

KIDNEY STONES

Kidney stones are hard deposits of minerals and salts that form in the kidneys when urine becomes highly concentrated. They may stay in the kidneys or move through the urinary tract, causing pain.



TYPES



Calcium stones – Most common; usually calcium oxalate.



Uric acid stones – Form in acidic urine; linked to high-protein diets and gout.



Struvite stones – Caused by recurrent urinary tract infections.



Cystine stones – Rare; caused by the inherited disorder Cystinuria.

SYMPTOMS



Severe pain in the back, side, or groin



Painful urination



Blood in the urine



Frequent urination



Nausea and vomiting



Fever and chills (if infection is present)

CAUSES



Dehydration



High salt or animal protein intake



High oxalate foods



Urinary tract infections



Certain medical conditions and medications

RISK FACTORS



Family or personal history of kidney stones



Obesity



Poor hydration



High-sodium diet

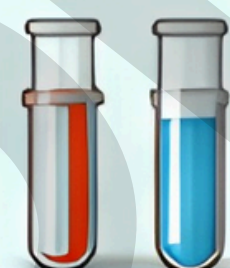


Diabetes or gout

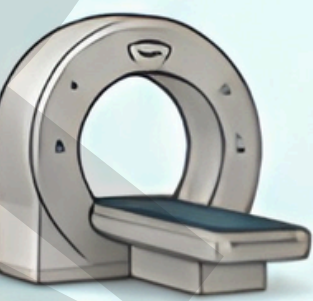


Digestive disorders

DIAGNOSIS



Urine and blood tests



Computed tomography (CT) scan



Ultrasound



Stone analysis

TREATMENT



Increased fluid intake



Pain-relieving medications



Medicines to help pass or dissolve stones



Extracorporeal shock wave lithotripsy (ESWL)



Ureteroscopy or Percutaneous nephrolithotomy for larger stones

PREVENTION



Drink plenty of water



Reduce salt and excess animal protein



Eat a balanced diet with adequate calcium



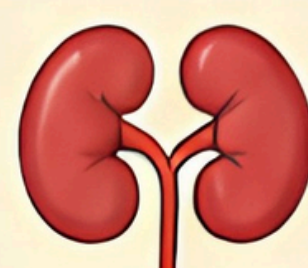
Maintain a healthy weight



Follow medical advice if prone to recurrent stones



Seek immediate medical attention if you have severe pain, fever, chills, or difficulty urinating.



Early diagnosis and proper care can prevent complications!