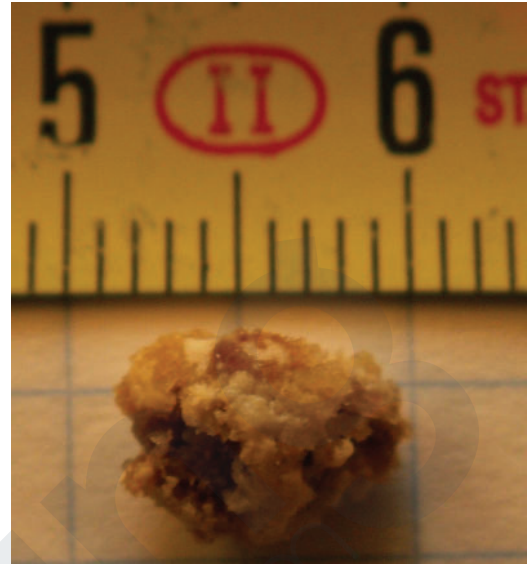


# RENAL CALCULI PATHOCHART

## PATHOPHYSIOLOGY

Renal calculi, or kidney stones, are stones that form within the kidneys due to a buildup of concentrated calcium deposits or other crystallized chemicals like uric acid. This could be due to a diet high in calcium or purines, dehydration, or urinary stasis. This causes severe pain and can obstruct the flow of urine, leading to signs and symptoms of a UTI, including hematuria, fever, and urinary urgency.



## ASSESSMENT FINDINGS

- Severe pain with sudden onset
- Dull flank pain
- Urinary urgency
- Signs of UTI
- Hematuria (blood in urine)
- Radiates from lumbar to flank, testicles, groin, or bladder
- Unable to start stream, indicates urethral obstruction

## DIAGNOSTICS

- Renal Ultrasound
- IV Pyelogram
- CT Scan

## NURSING PRIORITIES

- Promote Comfort
- Prevent Infection
- Manage Elimination Needs

## THERAPEUTIC MANAGEMENT

- Patient usually has to pass stone in urine
- Strain urine to catch stone
- Lithotomy
- Nephrostomy
- Extracorporeal Shock-wave Lithotripsy (ESWL)
- Uroscopy

## MEDICATION THERAPY

- Opioid analgesics
- NSAIDs
- Diuretics