

# ACUTE KIDNEY INJURY PATHOCHART

## PATHOPHYSIOLOGY

Acute Kidney Injury is sudden onset renal damage caused by either decreased perfusion to the kidneys (prerenal), damage to the kidneys themselves (intrarenal), or obstruction of flow out of the kidneys (postrenal). This leads to impaired ability of the kidneys to filter toxins from blood, regulate fluid & electrolytes, or maintain acid-base balance. Usually reversible, may resolve on its own, but can lead to permanent damage if not reversed quickly.

## ASSESSMENT FINDINGS

- Azotemia - ↑ BUN/Creatinine
- ↓ Glomerular Filtration Rate (GFR)
- Decreased urine output in oliguric phase
- Signs of volume overload
- Metabolic acidosis
- Electrolyte abnormalities
  - ↑ Potassium
  - ↓ Sodium
  - ↑ Phosphate
  - ↓ Calcium

## DIAGNOSTICS

- BUN, Creatinine Levels
- Glomerular Filtration Rate
- Clinical Findings

## NURSING PRIORITIES

- Balance Fluids & Electrolytes
- Manage Elimination Needs

## THERAPEUTIC MANAGEMENT

- Identify & treat cause
- Daily weights
- Restrict fluid intake
- Monitor urine output
- Patient may require dialysis
- During diuretic phase, replace fluids & electrolytes

## MEDICATION THERAPY

- Diuretics
- Inotropes and Vasodilators to improve renal blood flow