

## # Nephrology Clinical Reference Guide

### ### Chronic Kidney Disease (CKD)

- **\*\*Stages\*\***: G1 (Normal) to G5 (ESRD).
- **\*\*Management\*\***:
  - BP target <130/80 mmHg (ACE inhibitors preferred).
  - Avoid NSAIDs, contrast dyes, nephrotoxins.
  - Dietary: Low sodium (2g/day), protein restriction if G4+.

### ### Acute Kidney Injury (AKI)

- **\*\*Causes\*\***: Hypovolemia, sepsis, obstruction.
- **\*\*Treatment\*\***:
  - IV fluids (normal saline if hypovolemic).
  - Discontinue nephrotoxic drugs (e.g., vancomycin).
  - Monitor urine output, electrolytes.

### ### Hyperkalemia ( $K^+ >5.0$ mEq/L)

- **\*\*Emergency\*\***:  $K^+ >6.0 \rightarrow$  ECG changes (peaked T waves).
- **\*\*Treatment\*\***:
  - Calcium gluconate (cardioprotection).
  - Insulin + glucose, Kayexalate, dialysis if severe.

### ### Fluid Overload (CKD/ESRD)

- **\*\*Symptoms\*\***: Edema, hypertension, crackles on lung exam.
- **\*\*Action\*\***:
  - Restrict fluids to 1-1.5L/day.
  - Diuretics (Furosemide 40mg IV/oral).

### ### Nephrotic Syndrome

- **\*\*Diagnosis\*\***: Proteinuria >3.5g/day, hypoalbuminemia.
- **\*\*Treatment\*\***:
  - Prednisone 1mg/kg/day for 4-12 weeks.

- ACE inhibitors for proteinuria.

### ### Dialysis Indications

- **Absolute**:  $K^+$   $>6.5$ , uremic encephalopathy, refractory fluid overload.
- **ESRD**:  $eGFR <15$  mL/min.

### ### Common Nephrology Medications

- **ACE Inhibitors**: Lisinopril (CKD, hypertension).
- **Diuretics**: Furosemide (fluid overload).
- **ESRD**: Epoetin alfa (anemia), phosphate binders.