

CHRONIC KIDNEY DISEASE

PATHOPHYSIOLOGY

A progressive, irreversible loss of kidney function associated with the decreased rate the kidneys can filter out waste products from the blood causing an increase in the waste products making dialysis the only option to filter out the blood. This also can lead to decreased urine output, meaning increased amounts of volume in the blood, causing hypertension.

ASSESSMENT FINDINGS

The patient can present with many different complaints or problems. Hypertensive, lethargic, confused, ECG changes because of increased potassium (that is not filtering out), N/V, decreased urine output and potential coma.

DIAGNOSTICS

- Test the urine if the patient does produce any
- You are looking for protein in the urine
- Check the BUN and creatinine
- Lookout for azotemia
- Check a BNP to assess for CHF from the back up of fluids.

NURSING PRIORITIES

- Promote optimal electrolyte balance
- Promote optimal fluid balance
- Promote optimal cardiovascular function

THERAPEUTIC MANAGEMENT

- Monitor I&Os,
- Monitor potassium and other electrolytes (administer medications to correct any imbalance)
- Daily weights
- Monitor kidney labs (BUN & Creatinine)
- Assess cognition frequently
- Monitor for s/sx of heart failure
- Monitor BP

MEDICATION THERAPY

- Hyperkalemia - give kayexalate, glucose, insulin, and calcium gluconate.
- Hypokalemia - give potassium replacement
- Do not give medications that are filtered through kidneys - risk for toxicity (i.e. Aspirin)
- Administer phosphate binders if phosphate is high
- Antihypertensive medications (beta blockers, ACE inhibitors, Ca⁺⁺ Channel Blockers)