

The Atlantic Provinces Medical Peer Review



MANAGEMENT OF SPECIFIC DISEASE ENTITIES

Nephrology # 5 - CHRONIC RENAL FAILURE

It is important to note that these guidelines are meant to be of assistance to assessors in making observations. They should not be taken as standards of any of the Atlantic Provinces Licensing Authorities.

Description: classified as Stages 1 - 5 by glomerular filtration rate (GFR):

Stage 1: kidney damage with $GFR > 90 \text{ ml/min/1.73m}^2$

Stage 2: kidney damage with $GFR 60 - 89 \text{ ml/min/1.73m}^2$

Stage 3: $GFR 30 - 59 \text{ ml/min/1.73m}^2$

Stage 4: $GFR 15 - 29 \text{ ml/min/1.73m}^2$

Stage 5: $GFR < 15 \text{ ml/min/1.73m}^2$ or dialysis

General Prevention: limit nephrotoxic agents; treat all conditions known to lead to/exacerbate CKD: DM, HTN, Hyperlipidemia; in CKD, renally cleared drugs require dosage reduction to prevent toxicity, avoid volume depletion

Risk Factors: DM, HTN, urinary tract obstruction, autoimmune disease, UTI's, FH, acute renal failure, NSAID use, IV contrast, smoking, increasing proteinuria

Etiology: renal parenchymal/glomerular, vascular, interstitial/tubular, prerenal, postrenal

Signs & Symptoms:

- ✓ oliguria, nocturia, polyuria, volume overload, HTN, anemia, hyperkalemia, hyperphosphatemia
- ✓ hypocalcemia, bone disease, fatigue, depression, metabolic acidosis, pruritis
- ✓ metallic taste in mouth, uremia, anorexia, nausea, vomiting, pericarditis, CNS abnormalities
- ✓ hiccups, oliguria, odorous urine, xerostomia, coma, encephalopathy

Diagnosis:

- ✓ history and physical
- ✓ lab: calculate GFR; analyze urine: electrolytes, protein, WBC, RBC, casts
- ✓ blood: increased bleed time, CBC, creatinine, ammonia, PTH, VIT D, phosphate, lytes, lipids, glucose
- ✓ imaging: US, Doppler US, CT, MRI;
- ✓ diagnostic procedures: renal biopsy, HIV, ANA testing

Therapies:

- ✓ treat underlying conditions: DM, HTN, lipids; smoking cessation, pneumococcal /flu vaccines; diet
- ✓ medication: ACE inhibitors for HTN and proteinuria; add diuretic, diltiazem, verapamil or ARB to reach goal; non-aluminum, non-MG, calcium-based phosphate binder with meals
- ✓ oral calcium carbonate and calcitriol to suppress PTH; erythropoietin for anemia; statins for lipids;
- ✓ surgery: transplant for ESRD
- ✓ criteria for dialysis: pericarditis, fluid overload, unresponsive to diuretics, accelerated, unresponsive HTN, serum CR < 12mg/dL or BUN > 100 mg/dL

	N/A	E	S	D
Clinical history and physical exam are documented.				
It is evident that appropriate tests have been ordered and completed.				
Appropriate therapies are used and regularly reviewed.				

COMMENTS: _____
