

The Atlantic Provinces Medical Peer Review



MANAGEMENT OF SPECIFIC DISEASE ENTITIES

Nephrology # 4 -ACUTE 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.

Etiology: volume depletion: surgical, GI losses, renal; cardiac: MI, arrhythmias, malignant hypertension, valvular disease, chronic cardiomyopathy; redistribution of extracellular fluid: nephritic syndrome, advanced liver disease, malnutrition; peritonitis, burns, crush; peripheral vasodilation (sepsis, antihypertensive agents); renal artery stenosis; post-renal: ureteral or urethral obstruction; venous occlusion; renal/intrinsic causes: glomerular and small vessel disease, interstitial nephritis, tubular lesions

Associated Conditions:

- hyperphosphatemia, hydronephrosis, CHF, pericarditis, cirrhosis, malignant HTN, vasculitis,
- bacterial infection, drug reaction, hypercalcemia, hyperuricemia, sepsis, severe trauma, burns,
- transfusion, reaction, muscle injury, internal bleeding

Signs & Symptoms:

- anorexia, fatigue, weakness, lethargy, somnolence, rash, petechiae, purpura, ecchymosis,
- dyspnea, edema, HTN, CHF, tachycardia, tachypnea, rales, vomiting, diarrhea, GI bleed
- headache, delirium, seizures, asterixis, myoclonus, back pain, muscle cramps, epistaxis
- hiccups, oliguria, odorous urine, xerostomia, coma, encephalopathy

Diagnosis:

- history and physical
- tests: creatinine clearance, urinalysis, urine sediment and electrolytes/osmolality
- other: azotemia, hyperphosphatemia, hyperkalemia, acidemia, anaemia, increased magnesium and uric acid, increased amylase, hyponatremia, hypocalcemia, increased bleed time
- imaging: US, radionuclide scan, angiography, MRI;
- cystoscopy with retrograde pyelogram, renal biopsy

Therapies:

- discontinue or redose nephrotoxic medications; Foley catheter for accurate output
- daily weight, monitor BP and labs; treat hyperkalemia,
- hemodialysis: refractory hyperkalemia, acidosis, mental status changes, electrolyte imbalance
- avoid peritoneal dialysis in acute setting; hemofiltration for some critically ill patients
- correct easy bleeding with DDAVP, estrogen and cryoprecipitate; Prednisone;
- decrease catabolism; Mannitol: alkaline diuresis in rhabdomyolysis

	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: _____
