

DDx: AKI given creatinine elevation by >50% and low urine output

(RIFLE Criteria: R = RISK (Cr ↑ x150% or GFR ↓ by 25% or U/O <0.5mL/kg/hr x6hrs);

I = INJURY (Cr ↑ x200% or GFR ↓ by 50% or U/O <0.5mL/kg/hr x12hrs);

F = FAILURE (Cr ↑ x300% or GFR ↓ by 75% or U/O <0.5mL/kg/hr x24hrs or anuria x12hrs);

L = LOSS (complete loss of kidney function, requiring dialysis, x >4wks);

E = ESRD (complete loss of kidney function, requiring dialysis, x >3mos));

pre-renal (volume loss or sequestration, cardiac output, hypotension) vs. Renal (glomerulonephritis, small/large vessel vascular disorder, interstitial disorder, acute tubular necrosis from ischemia/nephrotoxins) vs. Post-renal (kidney/ureteral/urethral obstruction)

Ix:

- URINE OUTPUT: monitor with Foley catheter, should improve to >30ml/hr
- creatinine, BUN, lytes, extended lytes, albumin, urinalysis, urine lytes, urine osmolality, FENa, PVR, consider abdominal US; consider urine microscopy

Tx:

- hold & avoid nephrotoxic medications (NSAIDs, aminoglycosides, contrast dye, ACEi/ARB)
- adjust doses of renally cleared medications
- normal saline/furosemide to maintain euvolemia and BP
- monitor daily weight, ins & outs, BP, creatinine, lytes
- consider dialysis if symptomatic uremia, intractable acidemia, hyperkalemia, or volume overloaded
- consider urology consult if post-renal