

## Acute Renal Failure

### Definition:

- Abrupt decline in renal function: >50% in hours/days
- May or may not have decreased urine output
- Detected by increased serum creatinine and BUN and decline in GFR

### Etiology:

- Pre-Renal: dehydration, hypotension, NSAID, ACE-I, ARB
- Renal: Acute Tubular Necrosis (ischemia, drugs), Acute Interstitial Nephritis (drugs, UTI, SLE), Glomerulonephritis, intratubular obstruction (multiple myeloma etc.)
- Post-Renal: Nephrolithiasis, BPH, pregnancy, malignancy, blood clots, neurogenic bladder, fecal impaction

### Treatment:

Depends upon etiology and acuity:

- Identification of a low GFR does not mandate ED referral
- Identification of sudden decrease in renal function (>50% in hours/days), or identification of a condition anticipated to cause sudden decrease in renal function, **refer to the ED**

### If renal failure is:

<b>Acute (onset within hours/days)</b>	<ul style="list-style-type: none"> <li>• <b>Refer to the ED</b> for work-up and consideration of Internal Medicine hospital admission</li> <li>• Most common cause of early death is hyperkalemia and pulmonary edema</li> </ul>
<b>Subacute or chronic</b>	<ul style="list-style-type: none"> <li>• Initiate workup with labs, renal US</li> <li>• Stop possible offending medications (NSAID, ACE-I, ARB, diuretic etc.)</li> <li>• Initiate outpatient Internal Medicine/Nephrology referral</li> </ul>

## Resources

- [Acute Kidney Injury: Diagnosis and Management](#)

