

Date	Today	Yesterday				
<b>Sodium</b>						
<b>Creatinine</b>						
<b>UOP</b>						
<b>BP</b>						
<b>Medications</b>						
<b>Situations</b>						
<b>Contrast</b>						
<b>Obstruction</b>						
<b>Prerenal</b>						
<b>Events</b>						

**3 Ways Low Blood pressure can cause AKI:**

1. ATN from overt hypotension
2. Normotensive ATN
3. BP below the autoregulatory threshold

**Medications Commonly a/w AKI:**

1. NSAIDs
2. ACE/ARB: only worsen established AKI
3. Amphotericin B: onset 5-9 days after initiation
4. Acute interstitial nephritis (AIN)
  1. Can be from almost any medication
  2. Only 5-10% of patients have the triad of fever, rash, & eosinophilia
  3. Across all drug classes, fever present in 30%; rash present in 15-50%. Peripheral eosinophilia occurs in 80% cases from beta-lactate, but <1/3 of AIN from other medications. Urine eosinophils only have a sensitivity of 31% and specificity of 68% in biopsy-proven AIN. WBC casts in urine w/o a UTI are highly suggestive of AIN

**Situations a/w AKI:**

1. Heart failure
2. Heart catheterization: contrast or cholesterol emboli (cholesterol emboli typically occurs 2-6wks after catheterization; 75% have skin findings)
3. Tumor lysis syndrome
4. Decompensated cirrhosis
5. Thrombocytopenia: consider thrombotic microangiopathy
6. Hemoptysis: consider anti-GBM, ANCA Vasculitis, lupus, ect
7. Hypercalcemia
8. Recent surgery: look at anesthesia notes for hypotension

**Contrast**

1. Gadolinium does not cause AKI, but can cause nephrogenic systemic fibrosis
2. Iodinated contrast: contrast-associated AKI is overdiagnosed; consider it to be more of a diagnosis of exclusion

**Obstruction:**

1. Consider in men who complain of Suprapubic tenderness
2. Consider if there are large clots in urine, even with a foley
3. In the setting of a recent foley removal

**Prerenal History and Exam Notes**

1. Pretest probability for volume depletion high for new admits; lower on subsequent hospital days
2. Dry axilla: LR 3.0/0.6 for volume depletion
3. Dry mucous membranes: LR 3.1/0.4 for volume depletion
4. Sunken eyes: LR 3.7/0.6 for volume depletion
5. Decreased skin turgor in subclavicular area: LR 3.5/0.3 for volume depletion

**Events Associated w/ AKI:** cardiac arrest, surgery, hypotension after intubation, causes of rhabdomyolysis (seizures, influenza, cocaine, trauma, extreme exertion, malignant hyperthermia, neuroleptic malignant syndrome, amphetamines), large volume paracentesis.

**Steps:**

1. Review the trend of creatinine. Diagnose AKI by finding a 0.3mg/dL increase in Cr in 48h, a rise in Cr 1.5x baseline over 7 days, or UOP <0.5mL/kg/hr for 6h
2. Start trending “SCRUB” for 2 days prior to the onset in AKI. Denote significant items in the “Medical SCOPE’ during the same timeframe.
3. Come up with a differential diagnosis of at least 3 causes of AKI. Even if there is only one clear cause of AKI, list two differential diagnoses that are clearly not causes and be prepared to say why they are not the cause of AKI.
4. When presenting the patient, follow the following script: This is \_\_, a \_\_year old man/woman with a PMHx of \_\_. He/She presented to \_\_ with a chief complaint of \_\_. On initial evaluation, he/she was found to have the acute issues of \_\_. He/She was admitted on (\_\_ days ago) with the acute issues of \_\_. During the course of the hospitalization, the focus of care has been on the following issues: \_\_. Currently, the active issues are: \_\_. Starting \_\_ days ago, the patient developed AKI. Notable contributing factors in the development of AKI are (explain pertinent factors in AKI from your table).
5. Say your diagnosis: “This is a \_\_ year old X with worsening/stabilizing/resolving anuric/oliguric/non-oliguric AKI (on CKD?). The differential diagnosis for AKI etiology is highest for \_\_, but also includes \_\_. *\*note: non-oliguric is >500mL UOP/day; oliguric is 100-500mL UOP/day; anuric is <100mL UOP/day*