Splanchnic circulation

Liver

Kidney

Portal vein

IVC

Aorta

Heart

**CASES**

**Case 1:** A55-year-old woman with HCV cirrhosis presenting with fever and increased confusion. She reports increased abdominal girth but no pain, decreased UOP. Denies SOB, cough or dysuria. She has been taking lactulose as directed. On exam, she is afebrile, HR 92, BP 92/60, 98% on RA. She is diffusely edematous with a distended, nontender abdomen. Labs are notable for:

* Na 127, BUN 30, Cr 2.4 (baseline 1.2)
* WBC 12, Hct 30, Plt 90
* Tbili 4 (baseline 2-3), alb 2
* UA: RBCs, hyaline casts
* Urine Na <10

**What further work-up do you want?**

**What is the cause of AKI?**

**How would you manage this patient?**

**Case 2:** A 48-year-old man with HCV/EtOH cirrhosis actively listed for transplant presents from clinic with several lab abnormalities – worsening Cr, Tbili and INR. He reports increased fatigue, LE swelling and abdominal girth despite taking his diuretics. He reports mild abdominal diffuse abdominal discomfort but denies fever, chills, cough, SOB or dysuria. On exam, he is afebrile, HR 60, 92/45, 96% RA. He is diffusely edematous with a tight distended abdomen. Labs are notable for:

* Na 126, BUN 40, Cr 2.4 (baseline 1.0 from 1 month prior)
* WBC 8, Hct 28, Plt 80
* Tbili 11 (baseline 4), INR 5 (baseline 2)
* UA: 1+ protein, hyaline casts, occasional granular casts
* Urine Na>65, FeUrea 30%

**What further work-up do you want?**

**What is the cause of AKI?**

**How would you manage this patient?**

**Case 3:** A 45-year-old man with PSC cirrhosis presenting to the ED with increased abdominal pain typical of his PSC flares. The pain has been going on for about a week and he was initially managing it with OTC pain medications (Tylenol and ibuprofen) but has progressively worsened. He denies fevers/chills, cough or abdominal pain. He reports decreased UOP and darker colored urine. On exam, he is AF, HR 90, BP 120/80, 98% RA. He has a non-distended abdomen with mild RUQ tenderness without a Murphys’ sign. He has no CVA tenderness. Labs are notable for:

* Na 132, K 5.8, Cr 3.6 (baseline of 0.9)
* WBC 6, Hct 32, Plt 110
* Tbili 4 (baseline of 3), INR 1.4
* UA: hyaline casts, + WBC casts, no bacteria
* Urine Na 28, Urine Cr 60

**What is the likely cause of AKI?**

**How would you manage this patient?**