11/17/21 Morning Report with @CPSolvers

***Case Presenter**: Travis Smith (@RosenelliEM) **Case Discussants**: Rafael Alvim and Ravi Patel*

CC: 63 Y F presenting with progressively worsening back pain.

HPI: Presents to the ED with exacerbation of his chronic lumbar pain since 2 days, pain-constant and dull, nonradiating , increasing with mobilization and flexion, no numbness tingling, no urinary/fecal incontinence, no sensory changes.

PMH: HTn , DM , obesity, ESRD-hemodialysis, chronic back pain secondary to accident, dialysis through prosthetic AV graft. She does still produce urine

Meds: Losartan, amlodipine, gabapentin, hydralazine, Furosemide, tylenol with codeine,

Fam Hx: None

Soc Hx: no drug, alcohol, recreational drugs

Health-Related Behaviors:

No travel, pets, unusual health related behaviour

Allergies: None

Vitals: **T**: **98.4** **HR**:63 **BP**:140-80 **RR**: 18 **SpO_2**:96

Exam:

Gen:looked fatigue and mild distress

HEENT: mild pallor

CV: normal, NSR, no murmurs, gallops

Pulm: clear b/l, no adventitious sounds

Abd: obese, nontender to palpation

Neuro: motor and sensory normal

MSK: pain which was reproducible at midline L1-2 and the paravertebral muscles, no CVA tenderness. **Extremities:** pulses equal, 1+ edema, AV graft no inflammatory signs, no bruit and thrill palpated

Skin:no rashes, no petechiae, no jaundice

Notable Labs & Imaging:

Hematology:

WBC:10.7 neutrophils 86% no bands Hgb:9.9 Plt: 328

Chemistry:

Na: 136 K: 4.1 Cl:98 CO2: BUN: 48 Cr: 3.8 glucose:110 Ca:9 Phos:

Urine: pH:6; SPG:1.008, no casts, 28 RBC/Hpf, >100 WBCs/Hpf, Urine protein: +1, ACR:6, Protein/Cr: 10.79

Urine culture: neg

Imaging:

CT: retropulsion of L1/L2 posterior vertebral body elements with mild compression of the canal; no obvious enhancement of the soft tissues.

MRI: In addition to CT findings, spinal cord collection of fluid L1-L3 suggestive of epidural abscess

Course: Admitted and worsening BP elevation, worsening lower extremity edema with anasarca; C-ANCA: wnl, C3: 41 (low), C4: 21(wnl) , ANa: neg, RF: -, HIV/HBV/HCV: neg,

Blood Culture: positive for Staph

Final Dx: Staph associated glomerulonephritis with spondylosis

Problem Representation: A 63 Y female with history of ESRD and AV graft presents with acute progressive back pain, hematuria, leukocyturia and proteinuria.

Teaching Points (Franco):

- **Back pain - Screen for red flags:** saddle anesthesia, urinary/fecal retention/incontinence, weight loss, nocturnal pain, prolonged fever
- **Infectious etiologies:** look for risk factors, travel, drug use, catheters placement (Central lines, ESRD pts), immunosupresion
- **Other Sources of back-pain:** aneurysms, lung cancer, chronic, pancreatitis, retroperitoneal pathologies (adrenals, kidneys)
- **Movement: increase** pain with flexion can prioritize vertebral over other sources. **Decrease** of pain with flexion: spinal stenosis
- **Timing of pain:** not all cases present with pain and neurological symptoms present at the same time. Sometimes back pain precede neurological symptoms.
- **Spine Fractures:** they can happen without trauma hx, look for etiologies that reduce bone quality (ESRD, osteoporosis, infection, malignancy)
- **ESRD** patients can have functional nephrons that can still be susceptible to nephritis!