# 01/29/24 Morning Report with @CPSolvers

***"One life, so many dreams"* Case Presenter**: *Alison Sumner (@aliesumner)* **Case Discussants**: *Sara Belga (@belga_sara)*

**CC**: 65 y/o male presents w/ 2 weeks of progressive right flank pain associated w/ fever chills and general malaise.

**HPI**: Intermittent voiding symptoms x 2 months, urgency, incomplete voiding, but no dysuria or suprapubic pain. Left sided vision loss for the past several days.

**ROS:** Subjective fevers, occasional night sweats, but no headache, neck pain, cough, dyspnea or sore throat, no rashes or painful joints, no vomiting, diarrhea.

**PMH**: CAD Lichen sclerosis of the urethral meatus, remote ACL repair.

**Meds**: Baby aspirin, statin

**Fam Hx**: Denied

**Soc Hx**: born in Ontario, lived in BC w/2 children. Lives in suburbs and has a garden w/chickens. He is a high school math teacher. No recent travel history

**Health-Related Behaviors**: 30 pack year smoking hx, quit smoking 10 yrs ago. minimal alcohol use.

**Allergies**: None.

**Vitals: T:** febrile **HR:** 130 **BP:** 120/70 **RR:** 12 SpO2: 97% on RA

**Exam: Gen:** Well appearing

**HEENT:** no cervical LAP, oral dentition nl, no caries.

**CV:** Systolic ejection murmur apex, 2/6

**Pulm:** nl bronchovesicular sounds.

**Abd:** Soft non tender, no organomegaly. R flank tenderness on percussion

**Neuro:** nl cranial nerves, grossly normal motor, and sensation in the limbs.

Fundoscopy: Retinal hemorrhage, cotton wool spots.

**Extremities/skin:** no peripheral stigmata of IE.

DRE: Normal, non tender, no blood.

**Notable Labs & Imaging**:

**Hematology**:

WBC: 5.9 Hgb: 10.3 Plt: 124K

**Chemistry**:

Na: 130 K: 3.8 Cr: 106 AST: nl ALT: nl Alk-P: nl Albumin: nl CRP:178

BC & UC: GPC in cluster (Gram stain)

Clinical course: Abx started prior to cultures resulted → modified afterwards

**Imaging:**

EKG: Normal sinus rhythm CXR: Normal

CT abdomen: 2 cm R-renal abscess + fat stranding

CT head: possible cerebellar infarct

TEE: 2 cm mitral valve vegetation, severe regurgitation, and valvular perforation

MRI head: multiple bilateral acute + subacute infarcts.

BC & UC: Aerococcus urinae

**Dx: Aerococcus urinae native mitral valve IE w/ septic emboli. Favoured to be ascending urinary process w/ renal abscess, in the setting of urethral stricture. Treated with Penicillin G and Ceftriaxone → Eventually had valve replacement.**

**Problem Representation**: 65 y/o male presenting with R flank pain, fever, chills w/ history of lichen sclerosis of the urethral meatus. Found to have bacterial endocarditis 2/2 aerococcus urinae complicated by renal abscess and septic emboli.

**Teaching Points (Tansu)**:

**Complicated UTI:** Male + systemic symptoms + symptoms of prostatitis. Previous UTI? Important for management. // DRE: Important to assess prostate. // Remember prostate with LUTS + systemic symptoms: NOT simple cystitis.

If urinary & vision loss symptoms are related → More complicated infection with endophthalmitis → Hypervirulent Klebsiella pneumoniae, TB [especially in a host w/ predisposition], Endemic fungi (can increase the ICP → visual changes]. **No antibiotics before blood & urine cx. (the patient is not crashing in front of us!!!)**

2 possibilities: Pyelonephritis and IE (both clinical diagnosis):

- Pyelonephritis (**systemic symptoms, flank pain,** pyuria/hematuria @ UA, NV)
- IE (murmur, fever, stigmata [retinal hemorrhages unexplained by DM]) → Blood cx, echocardiogram. **Ask: Native valve vs. Prosthetic valve?**

**GPC in clusters: S.aureus,** other Staph. spp. → **Cefazolin** (MSSA coverage, well tolerated than Cloxacillin) + **Vancomycin** (MRSA)

- Cerebellar infarct @ CT head → Mycotic aneurysm?
- Spinal tenderness? Imaging may be required (2/2 vertebral osteomyelitis).

Other IE microorganisms Gram (+) (S.aureus (m.c.), Coagulase (-) Staph @ native/prosthetic valves, Strep spp./viridans (subacute)/ Strep gemella./ E. faecalis >> E.faecium). Gram (-)s, Candida (m.c. fungi), endemic mycoses, aspergillus (severe) → May req. surgical management.

**Aerococcus urinae: Gram (+) cocci in pairs/clusters, alpha-hemolysis (similar to Strep. viridans) on blood agar, (-) for catalase. Minimum 4 wks of tx. Surgical management may be necessary for certain cases (e.g. aortic root abscess).**