9/3/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Lourenço* ***Case Discussants****: Rabih & Renzo*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Zachary):

CC: 53M p/w **6 days of fever, myalgias, migratory symmetric polyarthralgia**, difficulty walking, lower abd pain & **red eye OU**

HPI: Fever + myalgias x6 days. Migratory, symmetric polyarthralgia, worse at rest → difficulty walking. Abd pain in inferior quadrants. Red eye.
Sx began ~2–3 wks after starting infliximab + azathioprine for UC (only 1 administration prior to ED presentation).

ROS: **Positive** - fever, myalgias, polyarthralgia, difficulty walking, lower abd pain, red eye.
Negative - CP, low back pain, HA, dyspnea, cough, urinary changes, muscle weakness, sensory changes, sphincter incontinence, ocular discharge or eye pain.

PMH:
HTN
HLD
Mitral valve prolapse
Ulcerative Colitis — dx 2023 (proctosigmoiditis), topical mesalamine → remission until 2025 → L-sided colitis refractory to topical mesalamine → prednisone early 2025 → infliximab + azathioprine early Oct 2025 w/ improvement

Meds:
Infliximab
Azathioprine
Amlodipine

Fam Hx: non-contributory

Social Hx:
Lives w/ wife in Lisbon
Works in an antique shop
Pet bunny
No recent travel

Health-Related Behaviors: —

Allergies: —

Vitals: T: 38.9°C **HR**: 57 **BP**: 160/90 **RR**: 23 **Sat**: 92% on RA **BMI**: —
Exam: Gen: tired, pausing to breathe while speaking; dry mucous membranes; no palpable LAD; no palpable synovitis | **Neuro**: —
HEENT: **B/L conjunctival suffusion**; no ↓ visual acuity, photophobia, proptosis or EOM restriction. **Slit lamp:** slight mucous discharge, B/L subconjunctival hemorrhage
CV: aortic systolic murmur; no JVD
Pulm: ↓ breath sounds R base w/ dispersed rales
Abd: soft, tender in inferior quadrants; no peritoneal signs, masses or organomegaly
Extremities/skin: maculopapular erythematous rash on trunk + extremities w/ some vesicles/pustules; erythematous non-raised lesion on L shin w/ inflammatory signs (no palpable nodule); B/L LE pitting edema

Notable Labs & Imaging:
ABG: pH 7.44/pCO2 29/pO2 61/sO2 92%/HCO3 20;
Electrolytes: Na 129 K 4.8 Cl 97 iCa 1.08 -> *2L O2 NC*
Hematology: WBC 9.8 (lymphopenia 0.8) Hgb 12 Plt 200 MCV 85
Chemistry: Urea 120 (prior 55 on 08/10) **Cr 6.93** (prior 1.01) T. bili 0.5 AST 26 ALT 28 GGT 268 (prior 59) ALP 141 (prior 48) LDH 261 (prior 187) Alb 4.1 CK 60/63 **CRP 330** PCT 6.60 ESR 69 ferritin 630 INR 1.11 aPTT 32.5 fibrinogen 7.7
UA (post-cath): nitrite neg, WBC 886, RBC 856, **UACR 4.9 g, UPCR 9 g, Flu/COVID**: neg
Imaging: ECG: sinus bradycardia, o/w nl. **CXR**: nl. **Renal US**: no obstruction, o/w nl
CT A/P w/ angio: mild, non-loculated, B/L nonspecific retroperitoneal edema; GI tract & kidneys/GU tract o/w nl
-> Blood Cultures x x2 + Urine catheter placed -> empiric pip-tazo (Zosyn) -> urine cath (low UOP; traumatic hematuria) -> anuric, Cr 10 -> volume overload refractory to diuretics -> dialysis -> persistent fever x4 days + rising inflammatory markers despite pip-tazo
Additional labs: folate & B12 nl; SPEP no M-spike, ↑ free light chains w/ nl SFLC ratio; ANA, anti-dsDNA, ENA, ANCA, anti-GBM neg; complement nl
Urine microscopy: ↑ renal tubular cells, mild pyuria, isomorphic hematuria → suggestive of tubulointerstitial injury (possible ATN or interstitial nephritis)
Micro/serologies: UCx neg; BCx x2 neg; HIV, Hep A/B/C, IGRA, VDRL & TPHA neg; EBV & CMV IgM neg / IgG pos; CMV viral load neg
TTE: dilated LV, LVEF 67%, no segmental changes; grade 2 diastolic dysfunction; nl RV; MVP w/ moderate–severe MR; moderate TR; no vegetations
Leptospirosis, tularemia, hantavirus & TB serology + PCR: neg
-> switched to ceftriaxone -> fever, inflammatory markers & kidney function improved, adequate UOP regained -> completed 10-day course
Kidney Biopsy: diffuse fibroedema of the cortex with intense lymphoplasmacytic infiltrate with eosinophils, and foci of tubulitis. Negative immunofluorescence
Dx: DRESS secondary to immunotherapy

Final Dx: DIHS/DRESS secondary to immunotherapy (most likely infliximab

Problem Representation: 53M w/ UC on infliximab + azathioprine (started ~2–3 wks prior), HTN, HLD & MVP p/w 6 days of fever, myalgias, migratory polyarthralgia, lower abd pain & B/L conjunctival suffusion, found to have maculopapular rash, hypoxemia & oliguric AKI → anuria requiring dialysis, w/ markedly ↑ inflammatory markers & negative cultures, serologies & autoimmune workup; improved after switch from pip-tazo to ceftriaxone.

Teaching Points (Preethi)

Approach to red eye: local vs systemic causes
Where is the redness? Primary conjunctival vs Redness in the eye causing secondary conjunctival redness. Think about eye being wrapped by the conjunctiva.
- **If there's redness in conjunctiva with discharge: primary conjunctival redness**
- **Red eye without discharge (primary is not the conjunctiva, discharge from the eye is not able to come out): Uveitis, scleritis (painful condition)**

Think about vigorous coughing which can also redness/conjunctival H'mg
Conjunctival involvement in infection: lepto

Approach to consequences in pt with existing autoimmune disease: Autoimmune + immunosuppression: infection, cancer, drug induced autoimmunity, concomitant autoimmune processes.
- **HF, Pneumothorax, CAP – most of the times CXR is definitive. If nothing present on CXR, something else is going on→ should get a CT**

DDx rapid kidney involvement and shut down:
- **Rapid progressive GN: weeks to months**
- **Anti GBM: rapid onset**
- **TMA: thrombocytopenia, hemolytic anemia**
- **Hemorrhagic fevers: hantavirus (europe and US)**
- **Glomerular: hypertension, edema, proteinuria; tubular: electrolyte leak**

Approach to widespread rapidly progressive tubulointerstitial nephritis:
- **Drug induced vs lymphoma/leukemia vs infections (hanta, tularemia, lepto, TB)**
- **Kidney biopsy will help with definitive diagnosis.**
- **DRESS iso recent immunotherapy: given widespread rash + tubulointerstitial nephritis**