8/25/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Praveen (@praeformed)* ***Case Discussants****: John (@calicocapybara) & Kirtan(@KirtanPatolia)*

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

Scribing (Ethan):

CC: 47/M with presents with one week of SOB and was already hospitalized the preceding week

HPI:

ER visit

Intubated, went into shock, and started broad spectrum abx at ER

PMH:
T2DM

Meds:
Metformin
Sitagliptin
Levocetirizine
Montelukast

Fam Hx:

Social Hx: driver in Malaysia

Health-Related Behaviors:
No habits of substance use or smoking

Allergies: NKA

Vitals: T: febrile **HR**:108 **BP**: 100/60 **RR**: 20 **Sat**: 97% on oxygen of unknown rate

Exam: Gen: drowsy, responsive to pain

HEENT:

CV: tachycardic, S1 S2 heard, no murmurs

Pulm: bilateral crackles

Abd: soft and nontender, no palpable mass or fluid wave

Extremities/skin: no changes, no erythema/pedal edema

Notable Labs & Imaging:

Hematology:

WBC: 5300 -> 2600 Hgb: 12.6 Plt: 104K -> 40K -> 38K INR:3.6

Required multiple FFP and PLT transfusions

Chemistry:

Na: 119 -> 134 K: 4.8 Cl: 92 HCO3: 92 BUN: 69.4 Cr: 0.9 Glu: 139 HCO3: 18

AG:13.8 AST: 260 ALT: 130 -> 266 -> 336 -> 852 D.Bili: 3.3 T. Bili: 4.7 -> 5.2

(progressive cholestatic pattern after hospitalization) T. protein: 5.2 Alb: 2.8 Globulin 2.4 g/dL A/G ratio: 1.1 A1C:7.5%

U/A: plenty of pus cells and proteinuria

HBV, HCV: negative

Imaging:

CXR: multiple bilateral consolidation

CT chest: bilateral extensive multifocal consolidation suspicious of septic emboli

TTE: EF 66%, mild MR/AR

Abd U/S: small hypoechoic lesions scattered in liver and spleen, likely microabscesses

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B/C: Burkholderia pseudomallei

Final diagnosis: Disseminated Melioidosis

Problem Representation:

A 47-year-old diabetic man with a subacute febrile respiratory illness refractory to broad-spectrum antibiotics, who developed multi-organ dysfunction, including encephalopathy, coagulopathy, cytopenias, and cholestatic liver injury, with imaging confirming pulmonary septic emboli and hepatosplenic micro-abscesses, consistent with disseminated melioidosis in a host with the classic risk factor of poorly controlled diabetes.

Teaching Points (Varsha)

-SOB could be relatively non-specific. Correlate with more context - acuity, context, baseline

-Respiratory system and neuro system involvement: syndromic/independent involvement → ensure airway protection

- Cause Vs consequence
- Systemic inflammatory response syndrome/ substance/ infections
- End organ damage? → altered perfusion to the brain/ Primary CNS involvement
- Crackles→ Cardiogenic?/ preexisting pulmonary exacerbation by acute insult

-Poorly controlled diabetes → influences the severity of possibilities, might not be the driving cause

- Routine work up
- Immunodeficiency infectious workup/blood cultures
- Ketones, (GLP1 agonist and SGL2 inhibitors → euglycemic DKA)
- CT angio chest, abdomen pelvis → scan all the parenchyma and viscera (DM can increase risk of atypical causes of pneumonia) → early source control in case of infections
    - Why Angiogram → shock → rule out vascular causes, tamponade, embolism

-Multiorgan dysfunction (CNS, Lung, Liver, Hematology (coagulopathy: elevated INR, apTT - elevated, low platelet(baseline?) -think DIC?/ infection?)) +Shock + Travel → >>Infection → Leptospirosis, Melioidosis, disseminated TB, arbovirus (malaria, dengue, chikungunya) → peripheral smear

-DIC causing organism → classic gram positive (staph and strep) and classic gram negative → usually earlier growth on cultures

-ALP elevated: bile duct is diseased: intra or extrahepatic involvement → cholangitis →. MRI/MRCP but could also be cholestasis if sepsis

- Rarely: Started with biliary problem - parasite/ stricture → stasis → growth of normal flora → ecoli/fusobacterium → disseminate → multisystem involvement

- microabscess in liver and spleen - staph and strep, klebsiella, pseudomonas, e coli, fusobacterium, staph and strep

- Slow growth:, burkholderia

-Severe neutropenia: candida