8/18/22 Morning Report with @CPSolvers

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CC: 50yF hx of sickle cell dz w frequent vaso-occlusive crisis w b/l leg and shoulder pain, becomes altered during workup

HPI:

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PMH:
HTN, ESRD on dialysis

Meds:

Fam Hx:

Soc Hx:

Health-Related Behaviors:

Allergies:

Vitals: T: 97 HR: 100 BP: 110/70 RR: 22 SpO2: 92%
Exam:
Gen:
HEENT:
CV:
Pulm: b/l crackles
Abd:
Neuro: lethargic nonverbal min response to voice
Extremities/Skin:

Notable Labs & Imaging:
Hematology:
WBC: 11 Hgb: 5.6 (baseline ~10-11) Plt: nl
LDH 889

Chemistry: CMP nl BUN Cr regular baseline
glucose: nl

Imaging:
CXR: b/l lung infiltrates
CT head: unremarkable
MRI: Pt has acute chest syndrome. Abx started
MRI: R transverse venous sinus thrombosis and extensive supra- and infratentorial hemorrhages c/w fat embolism syndrome

Final dx: fat embolism syndrome

Problem Representation: 50yF hx of sickle cell dz w frequent vaso-occlusive crisis w b/l leg and shoulder pain, becomes altered during workup, MRI shows signs of fat embolism

Teaching Points (Yazmin):

- Evaluate MIST in acute/subacute settings for a px with AMS.
- Acute chest sx. A complication of sickle cell disease characterized by new chest infiltrate and respiratory symptoms →presents with chest pain, dyspnea, and hypoxia. Pathophysiology is unknown, symptoms occur due to vaso-occlusive crisis within the pulmonary vasculature.
- Vaso-occlusive crises: recurrent episodes of severe deep bone pain and dactylitis
- AMS + bone pain → **fat embolism sx**. Can occur spontaneously in SCDx. Look in MRI and ddx with vascular process = right transverse venous sinus thrombosis and extensive supra and infratentorial micro
- Classic triad of:
  - Hypoxia (most common symptom): tachypnea, dyspnea, cyanosis, diffuse crackles in the chest
  - Neurological symptoms: confusion, lethargy, seizures, focal neurological deficits, coma
  - Petechial rash (seen in up to 50% patients) : mainly seen in the axilla, chest wall, head, neck, conjunctiva, and buccal mucosa
- Dialysis complications: metabolic disturbances, infections, protein loss, abdominal hernias, leakage of dialysate, pleural effusion (rare)
- Treatment for SC crisis consider: Blood transfusions and adequate supportive treatment (hydration, pain management, nasal oxygen, thromboembolic prophylaxis)
- Remember: Px with SC have functional asplenia = increased risk for encapsulated bacteria (strep pneumoniae, neisseria meningitis, haemophilus influenzae type b, salmonella typhi)
- Etiology:In SCDx → **Bone marrow necrosis due to microvascular occlusion in sickle cell crisis increases the risk of fat embolism.**