8/2/22 Morning Report with @CPSolvers

***Case Presenter**: Dr. Ravi Singh (@rav7ks) **Case Discussants**: Madellena Conte (@MadellenaC) and Debora Loureiro (@deboraloureiro)*

CC: 77yM w/ acute dyspnea & AMS
HPI:

- 77yM w/ R hip fracture and is being prepared for the OR
- Develops acute dyspnea and AMS X 1 hour
- Admitted 1d ago for fall down stairs and was found to have hyponatremia
- alertXoriented w/o dyspnea on presentation; just complains of pain of R hip;
- ROS: no chest pain, no fever, no cough or abdominal pain

PMH:
HFpEF
DM2
HTN

Meds:
Procardia XL 60mg
Lisinopril 10mg
Insulin

Fam Hx:
Diabetes, HTN

Soc Hx:
Retired school bus driver

Health-Related Behaviors:
none

Allergies:
none

Vitals: **T**: **37.9** **HR**: **107** **BP**:154/89 **RR**:22 **SpO_2**:88% in RA
Exam:
Gen: not awake, moaning when moving him
HEENT: JVP
CV: regular rhythm, no murmurs, normal rate
Pulm: prominent crackles b/l, some wheezing
Abd: distended abdomen, moaning on abd. palpation, tympanic to percussion, dullness on umbilical area, pain inferior of umbilical area
Neuro: asleep, wakes up and moans to several stimuli
Extremities/Skin: both legs swollen, similar, R sided shorter leg, outwardly rotated

Notable Labs & Imaging:
Hematology:
WBC: Hgb: Plt:

Chemistry:
Na: K: Cl: CO2: BUN: Cr: glucose: Ca: Phos: Mag:
AST: ALT: Alk-P: T. Bili: Albumin:

proBNP 5000
Imaging:
POCUS: Acute urinary retention due to BPH → AMS (cystocerebral syndrome); diffuse B-lines

Final dx: Cystocerebral syndrome & ADHF w/ fluid overload

Problem Representation:
77yoM w/ h/o HFpEF, DM2, HTN, R hip fracture p/w acute dyspnea & AMS while being prepared for the OR found to have cystocerebral syndrome & ADHF w/ fluid overload

Teaching Points (Promise):
-dyspnea causes: MIST, cardiopulm?
-AMS + dyspnea: acute time course
Hyponatremia, diabetes → AMS
Hypoxemia + crackles → alveoli filled with substances (could be fluid overload)

POCUS
-U/S bladder: fluid = anechoic. Hyperechoic = interfaces, tissues (diaphragm, renal calyx)
-US lungs: hyperechoic pleural line.
-A lines (horizontal) → normal
-B lines (vertical): >3 in a rib space, travel from top to bottom in screen
-PE on POCUS: wedge infarct (rare), focal B lines
B line ddx: focal vs diffuse B lines? + clinical picture
-focal: pneumonia, atelectasis, malignancy, infarction
-diffuse: pulm edema, ARDS, ILD, multifocal pneumonia

AMS ddx: MIST - electrolytes, organ dysfunction, other (urinary retention, constipation), infx - UTI, encephalitis, structural - SDH, toxins
Urinary retention → AMS
-pathogenesis: distended bladder activates adrenergic R and Locus Coeruleus (NE) → hyperarousal → encephalopathy and delirium (+elderly advanced age → cognitive impairment)