10/3/25 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Eugene (@EugeneBondzie)* ***Case Discussants****: Rabih (@rabihmgeha) and Seeme (@)*

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

Scribing (Shriya)

CC: 81F,KCO cerebrovascular accident with residual left hemiparesis,presents with complaints of **productive cough,difficulty breathing** and reduced activity over past **3 days** with acute worsening over past 12 hrs

HPI: Was in her usual state of health until 3 days ago when she developed a productive cough with whitish sputum and difficulty breathing. Over the past 12 hours, SOB worsened. Family reports whitish mucus around her lips and respiratory distress.

ROS: No fever, vomiting, diarrhea, chest pain, dysuria, urinary frequency; no hemoptysis, orthopnea, or PND, syncope, seizures, or incontinence.

PMH:
-Ischemic CVA 18 yrs ago with Residual paralysis
-HTN on dual therapy
-type2DM on Metformin

-**MEDS:**
metformin500mgBD
Carvedilol 12.5mgOD
Lisinopril 10mg OD
No antiplatelets/ Aspirin mentioned

Social Hx: with family, wheelchair-bound but able to participate in self-care

Health-Related Behaviors: Nonsmoker, no alcohol use. History obtained from relatives

Allergies: None

Vitals: T:36.8C(98.2F) **HR:** 108/min **BP:**133/73 mmHg **RR:** 25/min **Sat:** 91%
Exam: Gen/HEENT:Elderly woman in a wheelchair, looks unwell, mild pallor, anicteric, in obvious respiratory distress (flaring)
CV: S1, S2 heard, no murmurs **Abd:** No abnormality detected
Pulm: Air entry **reduced bl in lower lung zones**, vesicular breath sounds
Neuro:GCS 15/15, left facial droop, power 3/5 in left lower limb and 4/5 in left upper limb,5/5 in rt lower and upper limb. Bedside swallowing test was unreliable
Extremities/skin:mild **bipedal edema** up to ankles

Notable Labs & Imaging:
Hematology: **WBC:** 12,600 (neutrophilic leukocytosis), **Hb** 10.8 , **Plt:** 220
Chemistry: ABG drawn on RA: **pH** 7.46, **pCO_2** 36 mmHg, **pO_2** 72 mmHg, **HCO_3^-** 25 mmol/L, **SaO_2** 95%. **RFT** : **Urea**: 8.7mg/dl **Cr:** 1.05 mg/dl **eGFR** 58 ml/min/1.73m2 **Na**:140 **K:** 4.5 **Cl**:106
Was started on nasal cannula o2 with improved sat
Previous RFT: **Urea**:7.9 mg/dl **Cr:** 0.66 mg/dl
Na: 139.71 **K** :3.88 **AST:** 28 **ALT**: 32 **Alk-P**: 80 **Bili:** 0.9(total)
Albumin: 3 **CRP**: 45(elevated) **Procalcitonin:** 0.9 ng/mL (mildly elevated)



UA: Hazy, no blood, trace protein, trace WBCs, 4 pus cells/hpf, 30 epithelial cells
Troponin I: 0.02 ng/mL **BNP:** 210 pg/mL (mildly elevated)
D-dimer: 1.2mg/l **HbA1c:** 7.2%
EKG: sinus tachycardia, no acute ischemic changes
CXR: Bilateral middle & lower zone consolidations
USG abdomino-pelvic- Normal **Blood cultures**: No growth
Sputum: Normal flora **COVID** -neg
CTPA: no filling defects in the pulmonary arteries. Bilateral dependent consolidations with air bronchograms, most pronounced in posterior lower lobes
Pt improved with oxygen and antibiotics.

Dx: CAP with mild AKI

Problem Representation: 81F with PMH of CVA with residual paralysis,HTN,DM presented with cough,sob,weakness with neutrophilic leukocytosis,deranged RFT, afebrile, high Hba1c showing sinus tachycardia and B/L dependent consolidations in post lower lobes.

Teaching Points (Lera)

Cough: ***Irritation of the lungs.*** *Signal* vs. *substance* (ACEi) vs. *Structural* (Mediastinum / Diaphragm)
⊕ **SOB** -> *worry!* Indicates the ***dysfunction of the lungs***

Dyspnea:
- *Pre-lung* (blood) vs. *Lung* vs. *Post-lung* (heart)
  ⊕ **SOB** -> prioritize ***lungs***, but keep in mind the ***heart.***
- CVA -> ***aspiration related disease*** until proven otherwise.

Respiratory distress:
- ***Rx > Dx*** -> start on O2. *Nasal cannula* trial [effective up until 6L] -> *mask* delivery -> *HFNC* vs. *NIPPV.*
- ***When to choose NIPPV?*** *HF* [push back against venous pressure], *neuromuscular weakness, COPD.*

When to start antibiotics?
- ***Empiric indications.*** Sepsis / neutropenic fever / rigors / decompensated cirrhosis.
- ***Suspected focal infection*** -> PNA.

Pneumonia = acute ***infection*** in the ***alveolar*** space.
- ***Localization proxy*** -> crackles, CXR, US, CT.
  Mimics. *Irritants* [aspiration >> radiation, HSP, vaping], *vascular* [pulmonary edema, lung infarction] -> *cancer*.
- ***Infection prove*** -> *inflammation labs* ⊕ *bug search* [will be successful only in 40% of cases] -> use ***response to Rx*** as proxy.

"Illness severity drives the velocity of your pursue for Dx hypothesis".