04/02/21 Morning Report with @CPSolvers

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CC: shortness of breath

HPI: 33 year-old woman presents to the ED with worsening shortness of breath that began 5 days ago.
She also complains of chest tightness for 5 days.
No constitutional symptoms.
Also have difficulty sleeping and bad dreams for the last days.
She denies fever, nausea, vomiting or abdominal pain.

PMH:
Recently diagnosed with cervical cancer and Fanconi's anemia (6 months ago)
Type 2 diabetes (not controlled)
Obese
PCOS
COVID-19 negative

Meds:
Acetaminophen
Aspirin
Ibuprofen
Danazol
Cisplatin and radiation therapy (1 session) -> did not tolerate
2 weeks before, she switch to IV bevacuzimab and has just completed the second cycle

Fam Hx:
Maternal grandmother had melanoma
Grandfather had pancreatic cancer
Both parents HTA and DM

Soc Hx: no smoking or alcohol use

Health-Related Behaviors: none

Allergies:none

Vitals: **T**: **HR**: 125 **BP**: 167x108 **RR**: **SpO_2**: 89%
Exam:
Gen: alert, mild distress
HEENT: no obvious deformities
CV: no murmur, no JVD
Pulm: clear auscultation, non labored, crackles
Abd: normal
Neuro: normal
Extremities/Skin: normal

Notable Labs & Imaging:
Hematology:
WBC: 4,4 (N 72% Lymph 10% Mono 17%) | RBC 3,14 | Hgb: 12,1 | MCV 108,8 | MCH 38,8 | Plt: 51,000
Blood smear: vacuolated neutrophils, low number of platelets and large platelets, macrocytes moderate, moderate tear drop cells.
Chemistry:
BUN: 8 Cr: 0,62 AST: 70 ALT: 80 Alk-P: 217 T. Bili: 2,1
Albumin: 3,4 Prot 6,1 AG 8 LDH 2,2 ABG: pCO2 32,1 pO2 49 Bic 20,7 SatO2 86% CO2 22 Troponin: 0,21 Repeat troponin 0,105 and 0,09
Imaging:
EKG: sinus tachycardia, t wave abnormality
CTA: no evidence of PE. Multifocal pneumonia.
Bedside ECHO: EF 30-35% moderate global hypokinesis, no valvular disease. She was started on empiric IV cefepime.
Repeat CT: inflammatory and infectious etiology (typical X atypical pneumonia, less likely edema), trace bilateral pulmonary edema was noted. She was started on furosemide, ceftriaxone and doxycycline. She started to improve and continued on ATB and diuretics.
Repeat CXR: pulmonary edema was lessening.
Final diagnosis: drug-induced cardiomyopathy (d/t bevacuzimab) +atypical pneumonia + acute respir distress

Problem Representation: 33F with PCOS, Fanconi anemia, and cervical cancer on Bevacizumab p/w dyspnea, found to have HFrEF, hypoxemia, lung opacities, leuko and thrombocytopenia.

Teaching Points (Rafa):

- **YOUNG WOMAN W/ WORSENING SOB**
  Dyspnea pyramid: cardiopulmonary disorders are the main cause
  Young patient : PE, pulmonary HTN, vasculitis, obesity
  Many other etiologies including anemia, metabolic acidosis, neuromuscular weakness, anxiety, hyperthyroidism
- **CANCER AND NON-CANCER DYSPNEA**
  Chemotherapy side effects: dilated cardiomyopathy . lung injury
  Actual lesions like metastasis w/ damage to the parenchyma and the vessels, , hypercoagulable disorder (PE)
- **HYPOXEMIA**
  Pulse oximeter is not perfect!
  Many inaccuracies Including racial bias - not so accurate in black patients + hypoperfusion + methemoglobinemia (seen w/ cancer d/t treatment)
  If patients responds to oxygen - clue to true hypoxemia
  Alveolar problem:
  The alveoli are singing (filled w/ blood (DAH), water (cardiogenic or non-cardiogenic pulmonary edema), pus (WBCs w/ pneumonia)
  Collapsing like in atelectasis
  Vessel problem (shunting, microthrombi)
- **ANEMIA + THROMBOCYTOPENIA**
  Isolated enia - more of a distruction problem in the periphery
  Pancytopenia - more of a bone marrow disorder
  Hemolytic anemia + thrombocytopenia - MAHA - rule out emergencies -Chemotherapy drugs / HUS / TTP / DIC (increased PT/ PTT) - schistocytes on blood smear
- **HFrEF:** CAD, HYN, valvular disorders, arrythmia, dilated cardiomyopathy (alcohol, viral myocarditis, cocaine), idiopathic
- **LMNOP** - ischemic chest pain management
  Lasix, morphine, nitroglycerin, oxygen, positive pressure, and upright posture