4/5/26 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter***: *Gillian (@)* ***Case Discussants***: *Ethan (@e_chiu17) & Lera (@LNovotnaya)*

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

Scribing (Pranay & Seeme)

CC: A 20-year-old man presents to the emergency department with chest pain

HPI: 4th ED presentation in 2 years, 1 month ago intermittent chest pain, persistent cough, L shoulder pain, decreased appetite. He completed a course of azithromycin without improvement. Pain is worse on inspiration and on lying flat, functionally limiting, trace pericardial effusion on echo.

ROS: 10 pounds of weight loss, intermittent fever, watery diarrhea, headache, early satiety, no syncope presyncope or palpitations

PMH

Meds:
-

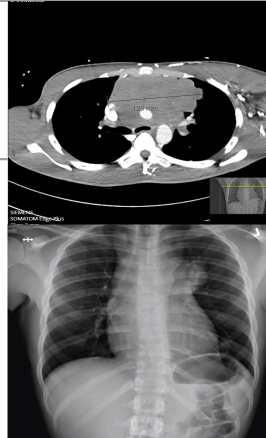
Fam Hx:
-

Social Hx:
-

Health-Related Behaviors:
no smoking, alcohol or drugs

Allergies: NKDA

Vitals: T: 101.6 F **HR**: 117 **BP**: 119/80 **RR**: 20 **Sat**: 100 **BMI**: 19.5
Exam: Gen: tired but not in distress
HEENT: no cervical LAD **Abd**: nl **Neuro**:nl
CV: tachycardia **Pulm**: decreased breath sounds left base
Extremities/skin: voluntary decreased ROM on L shoulder



Notable Labs & Imaging:

Hematology:
WBC: 12.2 (79%N 10%L) Hgb: 10.6 Plt:611 MCV:74

Chemistry:
Na: 135 K: 4.5 Cl: 101 HCO3: 24 Cr: 0.7 BUN: 9 Glucose: 106
AST: 52 ALT: 58 Alk-P: 198 Bili:0.5 Albumin: 2.3 Total Protein: 7.7
ESR: 85 CRP: 215 LDH: 544
proBNP 248, HS-trop <3, Fe 12, TIBC 127, tferrin sat 9% ferritin 2036
Infectious workup: Broad viral panel negative. EBV VCA IgG positive, EBV nuclear antigen IgG positive, EBV IgM negative. Blood cultures negative.
AFP <2 HCG negative, HIV: neg

Imaging:
EKG: sinus tachycardia, no ischemia
CXR: 4.7cm smooth mass in mediastinum at left
CT scan: narrowing of pulmonary arteries L,R and main, pulmonary embolism, SVC encasement, pericardial effusion, tracheal compression>50%, encasement and narrowing of ascending aorta, aortic arch and prox great vessels, 2cm anterior L lung lesion and 7mm nodule, pericardial and diaphragmatic LAD on left.
Patient transferred to surgical ICU, BP in 90s to 100, due to risk of hemorrhagic conversion heparin was held, US guided core needle biopsy performed under local aneasthesia with moderate sedation due to risk of airway compromise
Core needle biopsy: thymoma, WHO type B2

Dx: Thymoma – WHO Type B2

Problem Representation: A previously healthy 20-year-old man with recurrent ED visits for chest pain presents with several weeks of progressive pleuritic, positional chest pain, constitutional symptoms (fever, weight loss, fatigue), and decreased functional status, found to have a large invasive anterior mediastinal mass consistent with Thymoma, complicated by Superior Vena Cava Syndrome, bilateral pulmonary emboli, tracheal compression, and pericardial invasion/effusion

Teaching Points (Sarah B)

Age and Chest Pain: younger patients may have a different starting differential than older patients.
1) Risky behaviors and potential substances,
2) Genetic conditions: structural variants, cardiomyopathies, syndromes,
3) Bad luck.

Life threatening causes (4+2+2 schema) should still be ruled out even in patients you consider lower risk.
Time course and character of pain can be helpful.

Pleuritic Chest Pain:
Localization: Pericardium, pleura. Must differentiate whether these are the primary site or a secondary site of disease (e.g. MI->pericardial inflammation). Presence of a systemic syndrome can help broaden search for center of gravity of illness.
The recurrence and (-)CXR could point to autoimmune conditions/serositis. Pericarditis can also be caused by malignant and infectious etiologies.
EKG is often negative in patients with pericarditis.

Differential of a Mediastinal Mass:
Lymphoma, germ cell tumors, thymomas, thyroid carcinoma, neuroendocrine tumors.