6/17/22 Morning Report with @CPSolvers

Case Presenter: *Jane Lock (@kcolenaj)* ***Case Discussants:*** *Rabih Geha (@rabihmgeha) and Reza Manesh (@DxRxEdu)*

CC: 48yF w/ left sided chest wall pain

HPI:

- 1 week prior tripped and fell on L side
- Took Ibuprofen
- 1 week later pain acutely worsened and made it difficult to breath due to pain, 10/10, sharp, radiates from L flank to upper abdomen and chest wall
- ROS: denies fever, chills, cough, hemoptysis, PND, leg swelling, no recent travel

PMH:
HTN, menorrhagia resulting in chronic anemia, large uterine fibroids;
PSH: laparoscopic removal of fibroids, 1 upcoming removal;
breast implant 6y ago

Med
Atenolol, Amlodipin 5mg
Iron infusion

Fam Hx:
HTN,
Grandmother breast cancer, aunt breast cancer, grandpa stroke >70y

Health-Related Behaviors:
Tobacco 6-8x /d
No alcohol or other drugs

Allergies:
none

Vitals: T: 99F **HR:**88 **BP:**126/79 **RR:**20 **SpO_2:** 98% in RA
Exam:
Gen: no acute distress
HEENT: wnll
CV: no bruising or evidence of trauma on L sided chest , L anterior upper ribs w/ tenderness, normal S1 and S2, no murmurs, no gallops
Pulm: clear breath sounds, no dullness to percussion, no wheezing
Abd: no distension, no bruising, soft, mild LUQ tenderness
Neuro: wnll
Extremities/Skin: wnll

Notable Labs & Imaging:
Hematology:
WBC: 8.9 Hgb:8.2 Hkt 28.2 MCV 70.9 Plt: 238
Chemistry:
CMP wnll, Troponin negative, Covid negative
Imaging:
EKG: sinus rhythm, 74/min, no acute ST changes
CXR: no fracture, small L pleural effusion
Severe pain in deep inspiration, therefore she received CTPA
CTPA: b/l upper and lower lobe pulmonary embolism (PE), small L sided pleural effusion
CT-abdomen: 12cm enhancing mass on L sided uterus consistent w/ fibroid, b/l lower lobe PE
Doppler US: multiple clots in LE
Received Eliquis (Apixaban); Suspicious for May-Thurner (Cockett-Syndrome)-Anomaly due to compressing fibroid, 2 miscarriages in past (APLS?)
Menorrhagia: Fibroid removal recommended

Final dx: Pulmonary embolism leading to pulmonary infarction

Problem Representation: A 48-year-old female p/w L chest wall pain after a fall 1 week prior. PMH of HTN, multiple uterine fibroids and breast implants. FHx positive for breast cancer. PE & Imaging notable for tenderness on L sided chest wall and LUQ pain and L sided pleural effusion.

Teaching Points (Kirtan):

- **Approaching chest pain:** Inside vs Outside (Heart, Lungs, Mediastinum, Pleura, Pericardium, Ribs, Costochondral cartilage, Intercostal muscles, Cutaneous nerves, Extra-thoracic causes)
- **How to put history of trauma into perspective:** Rib fracture, Muscle hematoma, Compartment syndrome, intraperitoneal hemorrhage, Arterial dissection and visceral infarctions, splenic hematoma, perinephric hemorrhage, ovarian torsion or cyst, traumatic pleural effusion, implant rupture
- **Apparently normal physical examination:** Need meticulous evaluation to ensure that visceral organs are not affected. Anatomical approach can guide us further regarding the potential differential diagnosis.
- **Interpreting imaging studies:** Pleural effusion can signal intrathoracic or extrathoracic causes. Exudative vs Transudative. PE can cause both
- **Putting it all together:** Bottom line is that, infarction of any organ can lead to severe pain. So always a consideration in case of dramatic presentation.