Classic third year write-up mostly good

CC: MZ is a 35 year old African American female; with HIV; and a history of deep venous thrombosis who presented to the ER due to heat intolerance. "Yesterday; I felt very hot; like I was burning and when I checked my temperature; it was 106 C."

HPI:MZ was in her usual state of health; which allows her to lead a fairly active life. Until two weeks ago; patient noted pain on the right side of her chest. She noted that the pain worsened on exertion but she ignored it hoping it will subside on its own. On the other hand; nothing helps relieve her chest pain.
The day before admission she felt very hot; and on home temperature she was 106 C; however on ER admission she was 100.6 C. She had a cough that produced greenish sputum; but at the moment "it is not coughing out;"she says. She denies any shortness of breath; however in the emergency department was found breathless on her way to the bathroom. She was placed on 2L nasal cannula to help with her breathing. She described the pain as sharp; a 9/10 and worsens when she coughs or breaths; and it wasn't demartormal. There were no other symptoms. She denies runny nose; night sweats; or any recent weight loss. Her last hospitalization was in January for treatment of osteomyelitis. Her last CD4 count was 544 in March; and viral load 31;000. She has been noncompliant with her HAART therapy and denies any new medications or engaging in any new activities. She has not been sick and has never had chest pains or been told that she has heart disease. she denies all drug of abuse except for marijuana.

HPI: A bit disorganized with some extraneous info, misses some key info, but also good attempt to include relevant additional history and pertinents

PMH: HIV since 1988; Seizures since birth; left lower extremity; deep venous thrombosis since March

PSH: MRSA osteomyelitis of right middle finger and left index finger in January; 2006 and also cellulitis in the right side of her neck in March; 2006.

All: Amoxicillin/ clavulinic acid - rash

MEDS:Possible HAART; patient does not recall the names of the medications she is taking and was not consistent when asked the last time she took her medication; Dilantin- although dilantin level was <0.6 on admission; Coumadin

FH: unknown

SH: MZ is a gravid 1 para 0; married but hasn't lived with her husband for five years. She stays at her brother's sometimes but most of the time she is homeless. She does not work; smokes a pack of cigarette a day for ten years; denies drinking; denies all illicit drugs except marijuana. She states that she normally has irregular periods but for the past three months it has been regular and her last period was the 24th of last month.

ROS: Patient felt feverish but denies chills; she denies weight loss and night sweats.
SKIN: she denies any skin discoloration or rash
HEENT: she complains of burning sensation in the eye and some watery secretion.
CHEST/CVS: are as mentioned above.
GI: denies nausea and vomiting; first complained of diarrhea as frequent as every 30 minutes and later constipation
GYN: as mentioned above

NEURO: no memory loss

Other history: makes good attempt to fill in details, ROS a little odd

PHYSICAL EXAM:

Patient is a thin female; laying in bed in no acute distress; however patient is very uncomfortable when she sits up for a physical examination or when asked to take in a deep breath. She is alert; manipulative and a poor historian.

VS: T 98.0 BP 103/63; P 81; regular; R 18; O2 sat- 90% (RA)

Head: symmetrical; skin is intact; and no surrounding erythema.
Eyes: Pupils are equal; round and are reactive to light; no pale icterus; redness; or any exudate. Extra-ocular movements are intact.
Ear: both ear canals are clear other than some wax; no erythema or exudate
Nares: are clear with no discharge
Mouth: very poor dental hygiene; with many missing teeth.
Pharynx: no erythema; swellings or exudate
Sinuses: no tenderness on palpitation.
Neck: thyroid is non palpable; no JVDs and no carotid bruits or pulse were noted due to excess body fat in the neck region.
Chest: Breath sounds were clear everywhere except the right lower lobe; no wheezes or crackles; breast exam was deferred because patient was in a lot of pain.
CVS: regular rate and rhythm; S1 present; S2 present with no murmur heard on auscultation.
ABD: slightly tender; however no rebound tenderness or Murphy's sign; bowel sound present; no organomegaly; no hernia
GYN: deferred
Ext: no clubbing; no edema; no redness or erythematous
NEURO: CN 2-12 intact; sensation intact to pinprick; vibration; and light touch in all 4 ext; strength 5/5 bilaterally in upper as well as lower extremities; fine motor and coordination is normal.
She knew what day is was; the date she was admitted; where she was and her room number; she was able to remember her brother's number by heart. Mini Mental Status Exam was not indicated due to patient's age.

PE: the student has done a great job trying to accurately describe the findings , except the lung abnormality, also I'd discourage commentary like "manipulative"

LABS:

Na 130; K 2.0; Cl 97; Bicarb 19; BUN 62; Cr 2.2; Glu 88; AG 9; Mg 2.0; Phos 2.5.
CBC results showed WBC 15.6; differentials are pending; plt. 246; Hb 8.1; Hct 24.1
Dilantin level <0.6; lipase 37; transferrin 107; ferritin 783; Fe3+ 13; TIBC 127; Fe Sat 10
CCK = 71; troponin T <0.01
ProBNP 194.5; lactic acid 2.3; LD 358
Arterial Blood gas: 7.41/ 31/ 69/ 19.6/ 98.6 (3L nasal cannula)
Liver profile: albumin 2.9; total protein 8.1; total bilirubin 0.8; direct bilirubin 0.4; alkaline phos 94; ALT 76; AST 160; total globulin 5.2; indirect 0.4; A/G ratio 0.6
UA: yellow; hazy; moderate bacteria; occasional amorphous crystal; five squamous epithelium; specific gravity 1.010; pH is 5.5; protein 100; moderate occult blood.

Blood culture: gram stain was positive for streptococcus x 2; however culture is pending.

CXR: Right pleural effusion with associated possible atelectasis.

Lab data documented well

Problem list:
1) Low grade fever
2) Pleuritic Chest Pain
3) Shortness of Breath (SOB)
4) Cough (greenish sputum)
5) Anemia
6) Acute Renal Failure
7) HIV
8) History of lower leg extremity DVT
9) History of seizure

Problem list: Good start but missed some key finding like the electrolyte abnormalities which are immediately relevant.

Assessment and Plan:

This is a 35 year old African American Female with HIV; a history of seizure disorder; and past DVT; came in complaining of pleuritic chest pain; shortness of breath; and a productive cough with thick greenish sputum for two weeks.

Good attempt at summary though extraneous info and ideally should include working diagnosis

Pleuritic chest Pain/ SOB/ Cough/ fever - Bacterial pneumonia is compatible with fever; greenish sputum production; as well as crackles heard on the right lung base during physical exam; two gram stains with streptococcus; and an explanation of chest radiography results. It can also present as pleuritic chest pain and shortness of breath. In this HIV patient; bacterial pneumonia; specifically community acquired pneumonia was high on my list. Covered for atypicals until results of cultures came back negative for atypicals. Pneumocystis Carini Pneumonia (PCP) is less likely because CD4 count in March; 2006 was >500 and viral load 31;000; pO2 was 69 on admission; if she had PCP for two weeks pO2 should have been much lower. Tuberculosis is always something to keep in mind when a HIV patient presents with cough. Since patient's CD4 count is above 200 as off March; 2006; it was assumed that patient will present with typical signs and symptoms of TB; chest radiography did not show apical lesions. Moreover; on review of systems she was not coughing blood; no night sweats or weight loss. Tuberculosis does not explain her greenish sputum production.
Viral pneumonia is another differential although it does not present in this manner however an HIV patient can present very atypical.
Although patient has a history of lower extremity deep venous thrombosis; acute pulmonary thromboembolism is less likely because symptoms progressed over a two week period. Also; presentation was atypical with no leg pain or swelling; no hemoptysis; no tachypneia; chest x-ray was inconsistent with pulmonary emboli; and patient was on coumadin. Pulmonary hypertension and cor pulmonale are other etiologies to consider with symptoms of pleuritic chest pain and shortness of breath; but on physical exam patient had no JVDs and edema in addition to the presentation of exertional dyspnea and pleuritic chest pain.
Lung cancer is possible but unlikely because of her age and the fact that she is a short term

smoker. Chest X-ray ruled out sarcoidosis; pneumothorax; however pleuritis/serositis is still a possibility since it can be associated with pneumonia.

Quite wordy, but this student clearly states a working diagnosis and takes it the next step to mention possible organisms and correctly identifies the relevance of the HIV. The differential is very good though perhaps a bit more detail re: unlikely diagnoses, but at this stage more detail so we can understand the student's reasoning is better than less detail.

Although patient is young; her symptoms could be cardiac etiology that are related to myocardial ischemia resulting from coronary heart disease; ordered three sets of cardiac enzymes eight hours apart; the first sets negative. Aortic dissection is less likely due to chest x-ray. The etiology is less likely cardiac; therefore there was no indication for electrocardiogram to rule out myocardial infarction or an ECHO to rule out valvular heart disease; or any inflammation of the myocardium or pericardium.
Other causes of pleuritic chest pain are musculoskeletal etiologies such as costochondritis or incisional discomfort from coronary artery bypass syndrome; however these will not explain her productive cough; or abnormal chest x-ray.
Rheumatic diseases involving the thoracic joints and herpes zoster (with the pain presenting before the rash) could present in this fashion but she has no history of rheumatic diseases and didn't describe a demartomal distribution. In addition; cannot explain her abnormal chest X-ray and green colored sputum production.
GI causes of chest pain such as GERD; esophageal hyperalgesia; esophageal rupture; medication-induced esophagitis; abnormal motility patterns and alchalasia are also less likely because they cannot explain the abnormal chest X-ray; the cough or blood culture.
psychogenic/ psychosomatic causes of chest pain such as panic disorder; hypochondriasis; and depression are also possibilities; Anemic could cause her shortness of breath but cannot explain the other symptoms. Another differential for chest pain is referred pain from irritation of the mediastinal pleura or central diaphragm due to gall bladder but again cannot explain the rest of her pulmonary symptoms.

This second paragraph of ddx is where the student really went over the top and created unnecessary extra work. I would not "mark off" for this but would encourage the student to focus on more relevant issues rather than becoming completely academic to find a balance that will work in future practice.

Pneumonia- will cover for community acquired pneumonia; as well as atypical bacteria until cultures come back; ceftriaxone IV 1000 mg and Azithromycin 500 mg PO daily. CD4 count was above 500 in 03/2006; therefore Sulfamethazone/ trimethoprim was not indicated for PCP. Will check with her HIV clinic for update on pneumococcal vaccine; if she hasn't received any will make sure she receives one prior to discharge.
Chest Pain- oxycodone 5 mg PO every six hours or as needed.
Inflammation- Ibuprofen 600 mg PO every eight hours

seizure disorder- will administer dilantin 200 mg and check dilantin levels everyday.

DVT- hemodynamically stable; will administer heparin 5000 units injection every twelve hours

Prophylaxis- nexium 40 mg daily

HIV- will order a recent CD4 count and viral load in order to know what prophylaxis to begin prior to discharge. Counselled heron the importance of compliance with all of her

medications; including her seizure and her HAART therapy.

Full code

The plan contains good specifics though missed addressing some critical elements (renal failure, electrolyte abnormalities).

This is a pretty classic third year write-up where the data gathering is good, though some details missing. The student is able to grasp the big picture but goes into way too much detail on really irrelevant differential and does miss some key clinical issues (e.g. addressing a potassium of 2.) This is overall good for early third year and would neither hurt nor help the student's overall evaluation.