Case 1

A 65 year-old white male with lung adenocarcinoma presents with tachycardia and dizziness. He recently received chemotherapy for his lung cancer and had poor PO intake for last few days with associated diarrhea. In the ER, he received fluids for dehydration and overall is feeling a little bit better.

It is the end of a busy call day and it is the last admission of the day for your resident. The resident runs down to the ER to quickly evaluate the patient so that he can get home to avoid violating work hours.

The patient's labs are remarkable for mild hyponatremia and mild AKI. His EKG shows sinus tachycardia with no ST changes. His CXR read is notable for mild pulmonary edema with no cardiomegaly. The resident agrees with the ER physician's diagnosis of dehydration and plan to continue IVFs.

The next morning, while the new cases are being presented to you, the patient has an echo performed showing a large pericardial effusion with early tamponade physiology. When you rush to see the patient, you note that he has JVD and on the admission EKG, you note decreased voltages compared to prior EKGs.

- What types of cognitive bias were at play during various stages in this case?

- What questions would you ask your trainee about their diagnostic reasoning?
    - ***Recall & Recognize***

- How could each bias be mitigated proactively if you could "do it over"?
    - ***Revisit***

Case 2

A 35 year-old African-American male presents with epigastric pain. The patient was recently released from a 6-year prison sentence for marijuana distribution. Over the last month, he has had 3 ER visits with similar pain. He denies having similar abdominal pain while he was in prison. He does note that his pain improved with taking a hot bath today. His lab work, including a CBC, BMP, lipase, troponins and LFTs, were all unremarkable at his previous ED visits.

His initial labs for this visit are notable for a mild polycythemia, mild AKI, and ketones in his urine. He has a CT scan, KUB, RUQ ultrasound and exercise stress test which are all unrevealing. He reports smoking marijuana last about 6 weeks ago and his UDS is positive for marijuana. Your resident diagnoses him with marijuana hyperemesis syndrome and starts him on ketorolac for pain. The patient continues to complain of 10/10 pain. The resident each morning pushes to discharge the patient. The patient's family members are very upset given his continued pain and the team's refusal to provide IV pain medications. Given his continued pain and lack of improvement, GI is consulted. He has an EGD done which shows multiple gastric and duodenal ulcers, which are positive for H. pylori. His pain improves with treatment of his H. pylori.

- What types of cognitive bias were at play during various stages in this case?

- What questions would you ask your trainee about their diagnostic reasoning?
    - ***Recall & Recognize***

- How could each bias be mitigated proactively if you could "do it over"?
    - ***Revisit***

Case 3

A 75 year-old white male with CAD, CHF, DM type 2, HTN, and HLD presents with cellulitis. He was initially seen at an outside Emergency Room 3 days prior to presentation with pain in his left lower extremity. He was diagnosed with a cellulitis of his left lower extremity and was prescribed clindamycin. Today, he returned to the outside ER due to no improvement in his symptoms. He was transferred to our Emergency Room for further treatment. In our Emergency Room, he was given Vancomycin/Cefepime for cellulitis, then admitted to the medicine service by the night float resident, who continued him on these antibiotics to treat cellulitis.

You see the patient the following morning. Your own examination reveals that the skin proximal to the knee is warm and erythematous, but distal to the knee, his left foot is cold, numb and painful. There are no palpable or dopplerable posterior tibial or dorsalis pedis pulses in the left foot. His right foot is warm, well-perfused, and has palpable pulses.
Vascular surgery is consulted. He has an emergent arteriography and revascularization.

- What types of cognitive bias were at play during various stages in this case?

- What questions would you ask your trainee about their diagnostic reasoning?
  - ***Recall & Recognize***

- How could each bias be mitigated proactively if you could "do it over"?
  - ***Revisit***

Case 4

A 65 year-old white female with a history of COPD and tobacco use is admitted to your service for diverticulitis. On chart review, you notice she had a chest CT scan ordered by her pulmonologist, performed 6 months ago, which showed an 8mm pulmonary nodule in the left upper lobe. The radiology recommendation was for a repeat chest CT in 6-12 months. There is no mention of the lung nodule in the pulmonologist or PCP notes and the patient is unaware of the lung nodule. The patient's diverticulitis improves with nonsurgical management including antibiotics, and your team discharges her home. You make sure your team mentions the nodule to the patient and have it listed as problem in the discharge summary.

Six months later, you happen to be on service again and this patient is admitted to the hospital with shortness of breath. Chest CT shows a large LUL mass and left sided pleural effusion and the patient is subsequently diagnosed with lung cancer. Upon chart review, you notice that the patient had been seen by her PCP and pulmonologist since her admission for diverticulitis. Neither note mentioned the pulmonary nodule or plans for follow-up.

- What types of cognitive bias were at play during various stages in this case?

- What questions would you ask your trainee about their diagnostic reasoning?
    - ***Recall & Recognize***

- How could each bias be mitigated proactively if you could "do it over"?
    - ***Revisit***

Case 5

A 65 year-old African-American male with DM, HTN, HLD, and tobacco use is admitted to your team with chest pain. The pain is substernal, worse with activity, and radiates down his left arm. In the ER, his EKG shows ST depressions in the lateral leads and his troponin is elevated. His chest x-ray is unremarkable. He is started on nitroglycerin and heparin continuous infusions, with a plan for a left heart cath. Your resident then orders a CT Angiography Chest (PE protocol) which is negative for pulmonary embolism.

When you ask the resident why the patient had a CT scan, he conveys that he recently had a patient with chest pain he had thought was due to acute coronary syndrome, but the patient had a pulmonary embolism. The resident wanted to make sure that he did not miss a pulmonary embolism again.

- What types of cognitive bias were at play during various stages in this case?

- What questions would you ask your trainee about their diagnostic reasoning?
    - ***Recall & Recognize***

- How could each bias be mitigated proactively if you could "do it over"?
    - ***Revisit***