

1) (Blueprint) According to the US Preventive Services Task Force, what is the appropriate lung cancer screening method for patients who are aged 50–80, currently smoke tobacco or those with a former heavy history of smoking?

- A.** Low-dose helical computed tomography every three years
- B.** Magnetic resonance imaging of the chest every two years
- C.** Yearly chest X-ray
- D.** Yearly low-dose helical computed tomography

Answer: D

I chose this question for 2 reasons. 1) I am unaware of what a helical CT scan is. 2) Reading all of the answer selections before submitting an answer. I read A first, saw a CT scan, and submitted A without reading the other selections. Therefore, I got the answer wrong. CT should be performed yearly, not every 3 years. It's important to read all of the selections.

2) (Blueprint) A 72-year-old man with a history of tobacco use disorder presents with fatigue and unintentional weight loss over the last month. He is also reporting a feeling of fullness in his head that is made worse with bending forward. A chest radiograph is obtained and shows a large hilar mass with bulky mediastinal adenopathy. Which of the following physical exam findings would be most consistent with his diagnosis?

- A.** Alteration in gait
- B.** Distention of the chest wall veins
- C.** Dry mouth with reduced salivation
- D.** Ptosis

Answer: B

I chose D, incorrectly thinking that this was describing a Pancoast tumor. Pancoast tumors occur in the apices, but this tumor is in the hilar/mediastinal area. So what tumor is this, and what is occurring in the patient? The answer lies in the location and the symptoms. This centrally located tumor is causing superior vena cava syndrome. This pt is experiencing Pemberton's sign, increased feeling of head fullness when leaning forward. Leaning forward adds more pressure on already clogged veins. Pts w/ SVC syndrome will experience dilated chest veins. The correct answer is B.

3) (Blueprint) A 32-year-old woman presents to a primary care practitioner, reporting back pain, hematuria, and headaches. She started keeping a blood pressure log 2 weeks ago after a high reading at a recent health fair and reports her systolic blood pressure has been 140–150 mm Hg. Physical examination reveals the presence of large, palpable kidneys bilaterally. The patient says her 53-year-old mother and 34-year-old sister have a history of autosomal dominant polycystic kidney disease. The patient's estimated glomerular filtration rate is 75 mL/min/1.73m². What diagnostic study is indicated at this time?

- A. CT scan
- B. Excretory infusion urography
- C. Radiograph of the kidneys, ureters, and bladder
- D. Ultrasound

Answer: A

I chose D as US is usually an initial TOC for renal imaging. I learned that isn't the case for symptomatic polycystic kidney disease (PKD). For pts w/ symptomatic autosomal dominant PKD, CT is more sensitive for picking up small cysts that would be missed on US. This is important because the number and size of cysts helps to determine treatment.

4) (Blueprint) A 55-year-old woman presents to her primary care clinic with complaints of chronic dry eyes. She has also noticed a dry mouth, bad breath, and swelling on the side of her cheeks. Physical exam is notable for dry mucosal membranes and parotid gland enlargement. Lab work reveals positive rheumatoid factor and positive anti-Ro antibodies. What complication is this woman at risk of developing?

- A. Deep vein thrombosis
- B. Gastric carcinoma
- C. Non-Hodgkin lymphoma
- D. Pulmonary hypertension

Answer: C

This pt has Sjögren syndrome. The pathophysiology of Sjögren syndrome involves autoimmune mononuclear cell infiltration and destruction of exocrine glands. Pts w/ Sjögren syndrome are at increased risk for non-Hodgkin lymphoma. Dx of Sjögren syndrome involves parotid gland biopsy. More severe parotid enlargement is a predictor of future lymphoma. I chose D, which is a complication of scleroderma.

Disease	Key Antibody
Sjögren Syndrome	Anti-Ro (SSA) / Anti-La (SSB)
SLE (Specific)	Anti-dsDNA / Anti-Smith
Drug-Induced Lupus	Anti-Histone
Scleroderma (Diffuse)	Anti-Scl-70 (Anti-topoisomerase I)
Scleroderma (Limited/CREST)	Anti-Centromere

5) (Blueprint) A 30-year-old woman presents to the clinic with a fever, cough, and shortness of breath. She reports associated symptoms of fatigue and chills. Her vital signs include blood pressure 126/84 mm Hg, heart rate 108 beats/minute, temperature 39°C, and oxygen saturation 96% on room air. Her physical exam is consistent with increased tactile fremitus and dullness to percussion over the left lower lung field. A sample of her sputum is obtained and observed with a Gram stain significant for gram-positive cocci in pairs. What is the appropriate treatment for this patient's suspected diagnosis?

- A. Azithromycin and ampicillin
- B. Clarithromycin
- C. Clindamycin
- D. Levofloxacin

Answer: B

This pt requires outpt tx for uncomplicated s. Pneumoniae. I chose A, thinking that ampicillin alone can be prescribed outpt, but that is incorrect. For outpt, uncomplicated PNA, you can rx a macrolide, amoxicillin, or doxycycline. For this case, macrolide monotherapy with clindamycin is appropriate.

- A: Azithromycin + ampicillin would be correct for inpatient treatment.
- C: Clindamycin is the appropriate choice for aspiration PNA.
- D: Levofloxacin could be used for outpt, comorbid monotherapy.

6) (Blueprint) A 45-year-old woman presents to her primary care practitioner with painful discoloration of her fingers and nose when cold. She states her fingers become pale when cold and then become red and painful when they begin to warm up. She also reports difficulty swallowing and early satiety. On physical exam, she has tight, shiny skin and multiple telangiectasias. She currently smokes one pack of cigarettes per day and has no significant medical history. Which clinical intervention should be recommended first?

- A.** Initiating methotrexate
- B.** Initiating nifedipine
- C.** Initiating sildenafil
- D.** Initiating varenicline

Answer: D

This pt is presenting w/ Scleroderma c/w dysphagia and raynauds phenomenon. I chose B, but I learned that CCB is only indicated for Raynaud phenomenon when other tx and lifestyle modification have failed. I also learned that medical management of scleroderma is dependant on organ involvement. The correct answer is D because smoking cessation is most pertinent for scleroderma therapy. I was unaware of varenicline, it is chantix, a drug used for smoking cessation.

- A: MTX is used for severe scleroderma w/ MSK presentation
- B: Nifedipine is indicated for severe, persistent raynauds
- C: Sildenafil is indicated to tx pulm htn, which this patient isnt showing signs of

7) (Blueprint) A 68-year-old woman presents to urgent care with a rapid onset of symmetrical pain and stiffness of the shoulders, neck, and hip girdle that is worse in the morning and after prolonged inactivity. Because of the stiffness and pain, she is having difficulty with daily activities, such as combing her hair, taking a shower, putting on a coat, and driving. Which of the following is the most likely explanation for these findings?

- A.** Giant cell arteritis
- B.** Polymyalgia rheumatica
- C.** Polymyositis
- D.** Takayasu arteritis

Answer: B

I was torn between B and C and guessed C. This vignette has 3 distinct “giveaways” pointing towards PMR over polymyositis. 1) PMR involves pain vs. polymyositis which involves weakness. 2) PMR is worse in the morning vs. polymyositis which is constant and progressive. 3) PMR has a rapid onset vs. polymyositis which presents gradually.

- A: Giant cell has headaches and pulseless temporal artery
- C: muscle weakness, progressive onset, and constant
- D: dont know what this is. “Vasculitis of the aorta”

8) (Blueprint) A 44-year-old woman presents with concerns about fatigue, gradually worsening dyspnea on exertion, and dry cough over the course of several months. Her vital signs are within normal limits. A chest radiograph shows symmetric, bilateral hilar adenopathy. Which of the following would be the most likely finding on physical exam?

- A. Digital clubbing
- B. Livedo reticularis
- C. Peripheral lymphadenopathy
- D. Rales

Answer: C

B/L hilar adenopathy is almost pathognomonic for sarcoidosis. I chose A, a manifestation of sarcoidosis. That was incorrect, as clubbing is present in advanced disease and this pt is a new presentation. The correct answer is peripheral lymphadenopathy which is present in 40% of pts. In sarcoid, there are millions of small non-caseating granulomas that can travel throughout the body and end up in peripheral lymph tissue.

- A: only present in advanced disease when lung scarring causes chronic hypoxia
- B: present in vascular diseases like PAN
- D: rales are present in pathologies that involve excess lung fluid like CHF or pulmonary edema

9) (Blueprint) What surgical procedure can eradicate the carrier state of *Salmonella* and is an alternative to treatment with ciprofloxacin?

- A. Billroth I
- B. Cholecystectomy
- C. Splenectomy
- D. Whipple procedure

Answer: B

I was unfamiliar w/ the premise of this question. Apparently salmonella harbors inside of the gallbladder, so removing it is a possible treatment for pts w/ typhoid fever, acute enterocolitis, or salmonella bacteremia.

A: Billroth I does not remove the gallbladder; it removes the antrum, pylorus, and duodenal bulb

C: this would increase risk of salmonella infection bc the spleen can remove encapsulated bacteria such as salmonella

D: Whipple removes the gallbladder, but it's too invasive/expansive for this presentation. Typically reserved for operative pancreatic cancer of the head.

10) (SG) A 58 yo M presents to the ED following a MVA w/ headstrike on the dashboard. He is visible bleeding from multiple lacerations on his face. You also see pooling of blood around his abdomen. It is difficult to quantify exactly how much blood he has lost. When asked to point to the pain, the patient does not respond. When a nurse touches his head, he tries to withdraw his head. The patient is verbally responding to questions but he is confused. The patient is not opening his eyes when asked to but will open them with sternal rubs. The patient is tachycardic to 118 bpm, and his blood pressure is 80/60 mm Hg. Two large-bore intravenous catheters are placed. What intervention would be most appropriate at this time?

- A) pRBC transfusion
- B) CT scan of the head
- C) Fluid resuscitation
- D) Closing the open wounds with stitches

Answer: C

This question presents some distraction by going through GCS questioning. The patient is experiencing symptomatic blood loss from his lacerations. While this pt will likely need pRBCs, crystalloid fluids are readily accessible and resuscitation should begin immediately while pRBCs are en route.

- A: pRBC will likely occur but IV crystalloids should be used imminently
- B: CTH is crucial to r/u ICH but is not the most important
- D: You should not start closing the lacerations before stabilizing the patient

Bonus* What is this pts GCS?

Answer: 10

Eyes: 2 (Opens to pain/sternal rub)

Verbal: 4 (Confused)

Motor: 4 (Withdraws from pain)