

Question 1:

'A 67-year-old woman comes to the physician for a follow-up examination. She had a pulmonary embolism and required treatment in the hospital for 3 weeks. She had a retroperitoneal hemorrhage; anticoagulant therapy was temporarily discontinued, and she underwent placement of an inferior vena cava (IVC) filter. She had a hematoma that was resolving on discharge from the hospital 2 weeks ago. Today, she says she has had a persistent sensation of tingling and numbness of her left thigh that she did not report in the hospital because she thought it would go away; the sensation has improved somewhat during the past week. Her only medication is warfarin. Vital signs are within normal limits. Examination of the skin shows no abnormalities. Muscle strength is normal. Sensation to light touch is decreased over a 5 x 5-cm area on the lateral aspect of the left anterior thigh. Which of the following is the most likely cause of this patient's decreased sensation?', A. 'Cerebral infarction during the hospitalization', B. 'Complication of the IVC filter placement', C. 'Compression of the lateral femoral cutaneous nerve', D. 'Hematoma of the left thigh'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 2:

'A 25-year-old gravida 3 para 2 female is admitted to the hospital at 39 weeks' gestation in active labor. She had been having regular contractions every 4 minutes, but is now having only a few intermittent, weak contractions. She has received medication for pain twice in the past 6 hours. Examination shows no reason for obstructed labor. The fetal head is engaged, the membranes are intact, the fetal heart tones are normal, and the cervix is 100% effaced and 7 cm dilated. The most likely diagnosis is', A. 'Braxton Hicks contractions', B. 'lower uterine retraction ring', C. 'hypotonic uterine dysfunction', D. 'primary dysfunctional labor'

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Answer Option 1:

Final Answer: C

Answer Option 2:

Final Answer: C

Answer Option 3:

Final Answer: C

Answer Option 4:

Final Answer: C

Answer Option 5:

Final Answer: C

Answer Option 6:

Final Answer: C

Answer Option 7:

Final Answer: C

Answer Option 8:

Final Answer: C

Answer Option 9:

Final Answer: C

Question 3:

'A 5-year-old boy is brought to the physician by his mother because of a 2-day history of a low-grade fever, cough, and runny nose. His temperature is 38°C (100.4°F). Examination findings are consistent with a diagnosis of a common cold. The physician refers to a randomized, double-blind, placebo-controlled clinical trial that evaluated the effectiveness of a new drug for the treatment of the common cold. The mean time for resolution of symptoms for patients receiving the new drug was 6.4 days, compared with a mean time of 6.7 days for patients receiving the placebo ($p=0.04$). Which of the following is the most appropriate interpretation of these study results?', A. 'The findings are clinically and statistically significant', B. 'The findings are clinically insignificant but statistically significant', C. 'The findings are clinically significant but statistically insignificant', D. 'The findings are neither clinically nor statistically significant'

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Answer Option 1:

Final Answer: B

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Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: B

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Answer Option 4:

Final Answer: B

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Answer Option 5:

Final Answer: B

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Answer Option 6:

Final Answer: B

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Answer Option 7:

Final Answer: B

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Answer Option 8:

Final Answer: B

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Answer Option 9:

Final Answer: B

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Question 4:

'A 9-year-old boy is brought to the office by his parents for a well-child examination. The patient and his family immigrated to the United States 2 months ago and he has not been evaluated by a physician in 4 years. He has been generally healthy. Medical history is significant for pneumonia at age 3 years. He takes no medications. He is at the 25th percentile for height, weight, and BMI. Vital signs are temperature 37.0°C (98.6°F), pulse 82/min, respirations 20/min, and blood pressure 112/74 mm Hg. Cardiac examination discloses a grade 3/6 systolic murmur audible along the left sternal border at the third and fourth intercostal spaces. Femoral pulses are weak and brachial pulses are strong; there is a radiofemoral delay. Chest xray discloses mild cardiomegaly with left ventricular prominence. ECG shows left ventricular hypertrophy. This patient is at greatest risk for which of the following complications?', A. 'Atrial fibrillation', B. 'Cor pulmonale', C. 'Systemic hypertension', D. 'Tricuspid valve regurgitation'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 5:

'A 25-year-old woman comes to the physician because of a 2-month history of numbness in her right hand. During this period, she has had tingling in the right ring and small fingers most of the time. She has no history of serious illness and takes no medications. She is employed as a cashier and uses a computer at home. She played as a pitcher in a softball league for 5 years until she stopped 2 years ago. Vital signs are within normal limits. Examination shows full muscle strength. Palpation of the right elbow produces a jolt of severe pain in the right ring and small fingers. Sensation to pinprick and light touch is decreased over the medial half of the right ring finger and the entire small finger. The most likely cause of these findings is entrapment of which of the following on the right?', A. 'Median nerve at the wrist', B. 'Musculocutaneous nerve at the forearm', C. 'Radial nerve at the forearm', D. 'Ulnar nerve at the elbow'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 6:

'Six healthy subjects participate in a study of muscle metabolism during which hyperglycemia and hyperinsulinemia is induced. Muscle biopsy specimens obtained from the subjects during the resting state show significantly increased concentrations of malonyl-CoA. The increased malonyl-CoA concentration most likely directly inhibits which of the following processes in these subjects?', A. 'Fatty acid oxidation', B. 'Fatty acid synthesis', C. 'Gluconeogenesis', D. 'Glycogenolysis'

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Answer Option 1:

Final Answer: A

Answer Option 2:

Final Answer: A

Answer Option 3:

Final Answer: A

Answer Option 4:

Final Answer: A

Answer Option 5:

Final Answer: A

Answer Option 6:

Final Answer: A

Answer Option 7:

Final Answer: A

Answer Option 8:

Final Answer: A

Answer Option 9:

Final Answer: A

Question 7:

'A 72-year-old woman with advanced ovarian cancer metastatic to the liver is brought to the physician by her son because she cries all the time and will not get out of bed. On a 10-point scale, she rates the pain as a 1 to 2. She also has hypertension and major depressive disorder. She has received chemotherapy for 2 years. Current medications also include oxycodone (10 mg twice daily), hydrochlorothiazide (25 mg/d), and fluoxetine (20 mg/d). She is 165 cm (5 ft 5 in) tall and weighs 66 kg (145 lb); BMI is 24 kg/m2 . Her temperature is 37°C (98.6°F), pulse is 110/min, respirations are 12/min, and blood pressure is 120/80 mm Hg. Examination shows a firm, distended abdomen with moderate tenderness over the liver. On mental status examination, she is oriented to person, place, and time. She has good eye contact but appears sad and cries easily. Which of the following is the most appropriate next step in management?', A. 'Reassurance', B. 'Assess for suicidal ideation', C. 'Begin dextroamphetamine therapy', D.

'Increase oxycodone dosage'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 8:

'A 65-year-old woman has a 6-month history of progressive irritability, palpitations, heat intolerance, frequent bowel movements, and a 6.8-kg (15-lb) weight loss. She has had a neck mass for more than 10 years. 131I scan shows an enlarged thyroid gland with multiple areas of increased and decreased uptake. Which of the following is the most likely diagnosis?', A. 'Defect in thyroxine (T4) biosynthesis', B. 'Graves' disease', C. 'Multinodular goiter', D. 'Riedel's thyroiditis'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 9:

'A 51-year-old man comes to the office because of a 6-month history of a lump on his tongue that is interfering with his speech and eating; he also has had a 6.8-kg (15-lb) weight loss during this period. He has smoked 1 pack of cigarettes daily and has consumed six 12-oz bottles of beer on weekend nights during the past 30 years. His vital signs are within normal limits. Physical examination shows a 1.5-cm mass on the apex of the tongue. Further evaluation of the mass confirms squamous cell carcinoma. It is most appropriate to evaluate which of the following lymph nodes first for evidence of metastasis in this patient?', A. 'Inferior deep cervical', B. 'Parotid', C. 'Retropharyngeal', D. 'Submental'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 10:

'A 42-year-old man comes to the physician for a follow-up examination 1 week after he passed a renal calculus. X-ray crystallographic analysis of the calculus showed calcium as the primary cation. Physical examination today shows no abnormalities. A 24-hour collection of urine shows increased calcium excretion. Which of the following is the most appropriate pharmacotherapy?', A. 'Carbonic anhydrase inhibitor', B. 'Na⁺ -Cl⁻ symport inhibitor', C. 'Na⁺ -K⁺ -2Cl⁻ symport inhibitor', D. 'Osmotic diuretic'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 11:

'While you are on rounds at a local nursing facility, the nurse mentions that your patient, a 79-year-old woman, appears to be a "poor eater." She was admitted to the nursing facility 3 months ago from the hospital where she was treated for congestive heart failure. Her daughter had moved away from the area, and nursing home placement was necessary because the patient could no longer function independently. Her present medications include furosemide and digoxin. Physical examination is normal except for a weight loss of 3.5 kg (7 lb) during the past 3 months. In your conversation with the patient, she says, "No, I'm not depressed, I just don't have an appetite anymore. Nothing tastes good to me. I have a little bit of nausea most of the time." Which of the following is the most appropriate initial diagnostic study?', A. 'Chest x-ray', B. 'Complete blood count', C. 'Determination of serum albumin concentration', D. 'Determination of serum digoxin level'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 12:

'A previously healthy 24-year-old woman comes to the physician because of a low-grade fever and a nonproductive cough for 7 days. She has been able to continue her daily activities. Her temperature is 37.7°C (99.9°F). A few scattered inspiratory crackles are heard in the thorax. An x-ray of the chest shows patchy infiltrates in both lungs. Which of the following is the most appropriate initial pharmacotherapy?', A. 'Amoxicillin', B. 'Cefaclor', C. 'Ciprofloxacin', D. 'Erythromycin'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 13:

'A 15-year-old boy is brought to the emergency department by his parents because of a 2-hour history of confusion and agitation. He also has had fever, headache, stiff neck, and vomiting since he returned from summer camp 2 days ago. His parents say he does not use illicit drugs. On arrival, he is combative and there is evidence of hallucinations. His temperature is 40°C (104°F), pulse is 80/min, respirations are 17/min, and blood pressure is 100/70 mm Hg. A lumbar puncture is performed. Results of cerebrospinal fluid analysis show cysts and trophozoites. The most likely portal of pathogen entry into this patient's central nervous system is which of the following?', A. 'Facial nerve', B. 'Frontal sinus', C. 'Mastoid sinus', D. 'Olfactory nerve'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 14:

'A 32-year-old male presents to the office with the complaint of pain in his right shoulder for the past two weeks. Physical examination reveals tenderness at the greater tubercle of the humerus and painful abduction of the right upper extremity. The cause of this patient's condition is most likely a somatic dysfunction of which of the following muscles?', A. 'anterior scalene', B. 'latissimus dorsi', C. 'pectoralis minor', D. 'supraspinatus'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 15:

'A 19-year-old male presents to the office for evaluation after he was hit from behind below the right knee while playing football. Gait analysis reveals a lack of fluid motion. Standing flexion test results are negative. Cruciate and collateral knee ligaments appear intact. Foot drop on the right is noted. The most likely diagnosis is', A. 'anteriorly deviated distal femur', B. 'plantar flexed cuboid', C. 'posteriorly deviated fibular head', D. 'unilateral sacral shear'

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Answer Option 1:

Final Answer: C

Answer Option 2:

Final Answer: C

Answer Option 3:

Final Answer: C

Answer Option 4:

Final Answer: C

Answer Option 5:

Final Answer: C

Answer Option 6:

Final Answer: C

Answer Option 7:

Final Answer: C

Answer Option 8:

Final Answer: C

Answer Option 9:

Final Answer: C

Question 16:

'A 45-year-old limousine driver comes to the office for an initial appointment because he would like you to fill out and sign a legal document at the request of his attorney. The patient states that he is filing a lawsuit against the limousine company that employs him because he developed post-traumatic stress disorder following a motor vehicle collision. He appears irritable and tense as he provides his history. He relays his symptoms by reading them aloud from a written list. At this time, which of the following is the most appropriate approach toward confirming the underlying diagnosis of this patient?', A. 'Administer amobarbital and then interview the patient', B. 'Ask the patient to provide a narrative with detailed description of the incident and of his symptoms', C. 'Interview the patient under hypnosis', D. 'Interview the patient while paying close attention to his willingness to make eye contact'

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Answer Option 1:

Final Answer: B

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Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: B

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Answer Option 4:

Final Answer: B

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Answer Option 5:

Final Answer: B

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Answer Option 6:

Final Answer: B

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Answer Option 7:

Final Answer: B

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Answer Option 8:

Final Answer: B

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Answer Option 9:

Final Answer: B

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Question 17:

'A 5-year-old boy is admitted to the hospital because of a 1-week history of fever and increasingly severe abdominal discomfort. At the age of 7 months, he was treated for osteomyelitis caused by *Aspergillus fumigatus*. He has been admitted to the hospital three times during the past 4 years for severe pneumonia. He appears moderately ill. His temperature is 39°C (102.2°F). Abdominal examination shows an enlarged, tender liver. Ultrasonography of the abdomen shows an intrahepatic abscess. Culture of the abscess fluid grows *Staphylococcus aureus*. Further analysis shows failure of the neutrophils to undergo an oxidative burst when exposed to *S. aureus*. This patient has an increased susceptibility to infection as a result of which of the following abnormalities?', A. 'Failure of leukocytes to migrate between endothelial cells', B. 'Failure of leukocytes to roll along the endothelial surface', C. 'Inability of leukocytes to ingest microorganisms', D. 'Inability of leukocytes to kill intracellular microorganisms'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 18:

'A technician wants to determine whether cytomegalovirus (CMV) DNA is present in the blood of a bone marrow transplant recipient. DNA purified from the leukocytes of the patient is reacted in a mixture containing oligonucleotides specific for CMV DNA, thermostable DNA polymerase, and nucleotides. Repetitive cycles of heating and cooling are performed, and the reaction product is detected by gel electrophoresis. The technician most likely used which of the following laboratory procedures on this patient's blood?', A. 'Northern blotting', B. 'Polymerase chain reaction', C. 'Reverse transcription', D. 'Southern blotting'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 19:

'A 2-year-old boy is brought to the emergency department by his babysitter because of a 30-minute history of respiratory distress. The babysitter reports that she is 15 years old and has cared for the patient on numerous occasions during the past year. The child's mother, who is a single parent, is currently out of town for business but will return later tonight. The babysitter says, "He has had a runny nose since I started babysitting yesterday, but this afternoon he awoke from a nap with a barking sound and he was breathing real heavy." She does not know the child's prior health history, nor does she know if the boy takes any medications on a regular basis. The child looks tired and sits upright on the babysitter's lap. He is obviously comfortable with his caregiver. Vital signs are temperature 38.7°C (101.7°F), pulse 110/min, respirations 28/min and labored, and blood pressure 85/50 mm Hg. Pulse oximetry on room air shows an oxygen saturation of 89%. Physical examination discloses inspiratory stridor. Neck is supple, tympanic membranes are normal, and there is a profuse nasal discharge. Examination of the pharynx discloses no abnormalities. Auscultation of the chest discloses equal air entry on both sides and no crackles. The remainder of the examination shows no abnormalities. Treatment with 40% oxygen via venturi mask and intravenous fluids is initiated. Despite continued supplemental oxygen and hydration, the child remains tachypneic and stridorous at rest. Oxygen saturation is now 93%. In addition to administering racemic epinephrine by nebulizer, which of the following is the most appropriate next step?', A. 'Intravenous aminophylline therapy', B. 'Intravenous antibiotic therapy', C. 'Intubation', D. 'Oral dexamethasone therapy'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 20:

'A 16-year-old boy is brought to the physician because of a 3-day history of abdominal pain and vomiting; he also has had decreased appetite during this period. The pain was initially on the right but now has become generalized. His temperature is 38.8°C (101.8°F), pulse is 100/min, respirations are 20/min, and blood pressure is 143/83 mm Hg. Abdominal examination shows guarding with diffuse rebound tenderness. There are no palpable masses. A CT scan of the abdomen shows a perforated appendix. Examination of peritoneal fluid from this patient will most likely show which of the following organisms?',
A. 'Candida albicans', B. 'Citrobacter freundii', C. 'Escherichia coli', D. 'Staphylococcus aureus'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 21:

'A 52-year-old woman comes to the emergency department because of a 1-week history of low-grade fever and increasing abdominal cramps that are exacerbated by bowel movements. She began a course of amoxicillin-clavulanate and metronidazole 2 days ago but has had no relief of her symptoms. She has had intermittent constipation for the past 12 years. She has not had nausea, vomiting, urinary symptoms, or bloody stools. She has a 3-year history of hypertension. She underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy 5 years ago because of leiomyomata uteri. She is 165 cm (5 ft 5 in) tall and weighs 86 kg (190 lb); BMI is 32 kg/m². Her temperature is 38.1°C (100.6°F), pulse is 75/min, and blood pressure is 150/80 mm Hg. The lungs are clear to auscultation. Cardiac examination shows no abnormalities. The abdomen is soft, and there is tenderness to palpation of the left lower quadrant with guarding but no rebound. Bowel sounds are normal. The stool is brown, and test for occult blood is negative. Her hemoglobin concentration is 14.5 g/dL, leukocyte count is 15,000/mm³, and platelet count is 280,000/mm³; serum studies and urinalysis show no abnormalities. Which of the following is the most appropriate next step in diagnosis?', A. 'Test of the stool for Clostridium difficile toxin', B. 'Endoscopic retrograde cholangiopancreatography', C. 'Pelvic ultrasonography', D. 'CT scan of the abdomen with contrast'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 22:

'A 42-year-old woman comes to the physician because of a 1-year history of vaginal bleeding for 2 to 5 days every 2 weeks. The flow varies from light to heavy with passage of clots. Menses previously occurred at regular 25- to 29-day intervals and lasted for 5 days with normal flow. She has no history of serious illness and takes no medications. She is sexually active with one male partner, and they use condoms inconsistently. Her mother died of colon cancer, and her maternal grandmother died of breast cancer. She is 163 cm (5 ft 4 in) tall and weighs 77 kg (170 lb); BMI is 29 kg/m². Her temperature is 36.6°C (97.8°F), pulse is 90/min, respirations are 12/min, and blood pressure is 100/60 mm Hg. The uterus is normal sized. The ovaries cannot be palpated. The remainder of the examination shows no abnormalities. Test of the stool for occult blood is negative. Which of the following is the most appropriate next step in diagnosis?', A. 'Progesterone challenge test', B. 'Colposcopy', C. 'Cystoscopy', D.

'Endometrial biopsy'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 23:

'A 13-year-old girl is brought to the office for a health maintenance visit. She was diagnosed with Turner syndrome in infancy during a work-up for coarctation of the aorta. During today's visit, her mother reports that the girl has been talking about babies. You have been the patient's physician for the past 6 years and know she is prepubescent. It is most appropriate to counsel the patient that if she wishes to have a family she will need to do which of the following?', A. 'Adopt', B. 'Have amniocentesis if she gets pregnant', C. 'Have an operation', D. 'Receive genetic counseling'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 24:

'A 77-year-old man is brought to the physician because of a 12-hour history of word-finding difficulty and weakness and sensory loss of the right arm and leg. He has no history of similar symptoms. He has type 2 diabetes mellitus, hypertension, and atrial fibrillation. Current medications include metformin, lisinopril, and aspirin. He is alert. His pulse is 80/min and irregular, respirations are 16/min, and blood pressure is 170/90 mm Hg. He follows commands but has nonfluent aphasia. There is moderate weakness and decreased sensation of the right upper and lower extremities. Deep tendon reflexes are 2+ bilaterally. Babinski sign is present on the right. His serum glucose concentration is 162 mg/dL. Which of the following is the most appropriate next step in diagnosis?', A. 'Carotid duplex ultrasonography', B. 'CT scan of the head', C. 'EEG', D. 'Lumbar puncture'

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Answer Option 1:

Final Answer: B

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Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: B

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Answer Option 4:

Final Answer: B

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Answer Option 5:

Final Answer: B

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Answer Option 6:

Final Answer: B

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Answer Option 7:

Final Answer: B

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Answer Option 8:

Final Answer: B

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Answer Option 9:

Final Answer: B

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Question 25:

'A 16-year-old high school student, whose prenatal course you have managed, delivers a 3256-g (7-lb 3-oz) baby girl during the night with the assistance of your associate. On morning rounds you note that the delivery records report that she had mildly elevated blood pressure during labor and sustained an estimated third-stage blood loss of 500 mL. Today blood pressure is 132/84 mm Hg, she is afebrile, and deep tendon reflexes are normal. The uterine fundus is firm and at the level of the umbilicus, and her perineum is slightly edematous. Hematocrit is 33%. She is cuddling her infant and normal bonding seems to be occurring. Which of the following is the most important next step in management?', A. 'Begin oral methyldopa', B. 'Institute fundal massage', C. 'Order daily sitz baths', D. 'Provide education for well-baby care'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 26:

'A previously healthy 17-year-old girl comes to the physician because of a 2-month history of exercise-induced cough and nasal congestion. She plays field hockey and has noticed she coughs when running up and down the field. The cough is nonproductive and resolves with rest. She has not had chest pain or palpitations. She takes no medications and does not smoke. Her sister has asthma. The patient appears well. Her pulse is 68/min, respirations are 16/min, and blood pressure is 100/75 mm Hg. Pulse oximetry on room air shows an oxygen saturation of 99%. Cardiopulmonary examination shows no abnormalities. An x-ray of the chest shows no abnormalities. Spirometry shows an FEV1:FVC ratio of 90% and an FEV1 of 90% of predicted. Which of the following is the most likely diagnosis?', A. 'Asthma', B. 'Chronic bronchitis', C. 'Gastroesophageal reflux disease', D. 'Postnasal drip syndrome'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 27:

'A 24-year-old woman comes to the physician for a follow-up examination. One week ago, she was treated in the emergency department after she accidentally spilled hot grease on her left leg while working at a fast-food restaurant. Examination of the left lower extremity shows a 7-cm, pink, soft, granular, edematous wound. The formation of this tissue was most likely caused by increased activity of which of the following?'; A. 'Glycosylation-dependent cell adhesion molecule-1', B. 'P-selectin', C. 'Stromelysin', D. 'Vascular endothelial growth factor'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 28:

'A 23-year-old woman comes to the physician for genetic counseling prior to conception. Her brother and maternal uncle had Duchenne muscular dystrophy (DMD) and died at the ages of 28 and 17 years, respectively. Genetic analysis was not performed on either relative prior to death. Serum studies show a muscle creatine kinase concentration of 120 U/L (N=22– 198). The patient's 50-year-old mother has a serum muscle creatine kinase concentration of 300 U/L. Which of the following is the most appropriate assessment of this patient's carrier status for this disease?', A. 'The patient has a 50% risk of having a child with DMD', B. 'The patient is a carrier of the disease based on her family history of DMD', C. 'The patient is not a carrier of the DMD based on her normal creatine kinase concentration', D. 'The patient's DMD carrier status is uncertain because of random X inactivation'

=====

Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 29:

'A 3-year-old white girl is brought to the office by her parents for a follow-up visit 48 hours after receiving a 5-TU PPD skin test. The test was done as part of a routine screening for enrollment in a homeless shelter. Physical examination shows 10 mm of induration at the puncture site; the examination is otherwise normal. The parents tell you they are shocked by this finding since both of their skin tests were nonreactive. They say they were born in this country and tell you that their daughter has always been in good health. She has not had much medical care in the past 2 years but she has been healthy. Until moving into this shelter they had been "squatters" in vacant buildings. Which of the following is the most appropriate step at this time?', A. 'Call her previous physician to obtain more history', B. 'Order a chest x-ray', C. 'Order a test for HIV antibody', D. 'Repeat the PPD skin test'

=====

Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 30:

'A 65-year-old female is admitted to the hospital after experiencing aphasia and right-sided hemiparesis. She subsequently develops urinary incontinence. There is no evidence of urinary tract infection and no prior history of urinary pathology. The most likely diagnosis is', A. 'autonomic neurogenic bladder', B. 'motor paralytic bladder', C. 'reflex neurogenic bladder', D. 'uninhibited neurogenic bladder'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: C

=====

Answer Option 5:

Final Answer: D

=====

Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: D

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Question 31:

'A 35-year-old woman comes to the office because of a 3-day history of severe right back pain. She has not had any fever, chills, or weight loss. She has no history of major medical illness. Musculoskeletal and neurologic examinations show no abnormalities. When told that her examination is normal, the patient becomes tearful and demands an MRI of her back because her mother just died from breast cancer metastatic to bone and she fears that she may also have cancer. The patient already contacted her insurance company, who told her that if she has neurologic abnormalities an MRI may be covered by her plan. The patient asks the physician to order the MRI indicating that she has neurologic findings. Which of the following is the most appropriate initial action by the physician?'. A. 'Advise the patient to change insurance companies as soon as she is able so that she can receive more comprehensive medical care', B. 'Explain that the patient does not need the MRI and that it is not appropriate to misrepresent her examination findings', C. 'Immediately inform the patient's insurance company about what the patient has asked the physician to do', D. 'Order the MRI as the patient requests'

=====

Answer Option 1:

Final Answer: B

=====

Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: B

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Answer Option 4:

Final Answer: B

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Answer Option 5:

Final Answer: B

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Answer Option 6:

Final Answer: B

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Answer Option 7:

Final Answer: B

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Answer Option 8:

Final Answer: B

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Answer Option 9:

Final Answer: B

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Question 32:

'A 32-year-old man is brought to the emergency department 30 minutes after being struck by a car while driving his motorcycle. He reports severe pelvic pain. On examination, there is bruising of the perineum and pain is elicited with motion of his pelvis. Blood is noted at the urethral meatus. There is no other penile trauma. A plain x-ray shows a fracture of the superior pubic ramus and retrograde urethrography is done to evaluate for a urethral disruption. Which of the following portions of the urethra would be at greatest risk for injury in this patient?', A. 'Intramural (pre-prostatic)', B. 'Membranous', C. 'Prostatic', D. 'Spongy'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 33:

'A 33-year-old female presents to the office with the complaint of chronic pelvic pain that began after she underwent a hysterectomy 6 months ago. Following a physical examination, a CT scan of the pelvis is ordered. After the scan is complete, the radiologist calls to report that the patient has a surgical sponge in her pelvis. In a subsequent malpractice suit, the plaintiff establishes that the sponge could not have been left unless there was negligence. The most appropriate term to represent the legal concept invoked by the patient is', A. 'collateral estoppel', B. 'proximate cause', C. 'res ipsa loquitur', D. 'respondeat superior'

=====

Answer Option 1:

Final Answer: C

Answer Option 2:

Final Answer: C

Answer Option 3:

Final Answer: C

Answer Option 4:

Final Answer: C

Answer Option 5:

Final Answer: C

Answer Option 6:

Final Answer: C

Answer Option 7:

Final Answer: C

Answer Option 8:

Final Answer: C

Answer Option 9:

Final Answer: C

Question 34:

'A 35-year-old man comes to the office for follow-up of sarcoidosis. His only new complaint is pain in his legs that increases with weight-bearing. He has been taking glucocorticoid therapy for the past 6 months. Vital signs now are temperature 37.0°C (98.6°F), pulse 78/min, respirations 14/min, and blood pressure 110/70 mm Hg. The patient is thin and is in no acute distress. Auscultation of the chest discloses scattered bilateral basilar crackles. There is mild left hip pain present with both active and passive range of motion. Dorsalis pedis pulse is intact. Neurologic examination is normal. Which of the following is the most likely cause of this patient's symptoms?', A. 'Avascular necrosis of the femoral head', B. 'Herniated nucleus pulposus', C. 'Narrowing of the hip joint', D. 'Osteoporosis'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 35:

'A 67-year-old man with Parkinson disease is admitted to the hospital for treatment of pneumonia. The patient's daughter, who is visiting the patient, says he has had increased lethargy for the past day and decreased ambulation during the past 6 months. She also says that there are times during the day when his tremors increase in severity, although he continues to care for himself at home. Medical history is also remarkable for hypertension. Medications include hydrochlorothiazide, atenolol, levodopa, and carbidopa. He is 168 cm (5 ft 6 in) tall and weighs 78 kg (172 lb); BMI is 28 kg/m2 . Vital signs are temperature 38.9°C (102.0°F), pulse 60/min supine and 68/min standing, respirations 22/min, and blood pressure 100/60 mm Hg supine and 80/50 mm Hg standing. The patient appears ill and older than his stated age. He is fully oriented but lethargic. Auscultation of the chest discloses rhonchi in the right mid lung field. Abdominal examination discloses no abnormalities. Neurologic examination discloses masked facies, bradykinesia, and cogwheel rigidity; gait was not assessed on admission. Chest x-ray shows a right lower lobe infiltrate. ECG shows no abnormalities. Appropriate intravenous antibiotic therapy is initiated. Prior to discharge, which of the following is the most appropriate step?', A. 'Obtain CT scan of the chest', B. 'Obtain a swallowing evaluation', C. 'Place a percutaneous endoscopic gastrostomy (PEG) tube', D. 'Prescribe fludrocortisone'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 36:

'A 64-year-old woman comes to the physician because of a 5-month history of increasing shortness of breath, sore throat, and a cough productive of a small amount of white phlegm. Over the past week, she has had nausea related to excess coughing. Over the past year, she has had a 3.2-kg (7-lb) weight loss. She has asthma treated with theophylline and inhaled β -adrenergic agonists and corticosteroids. She has smoked one pack of cigarettes daily for 44 years and drinks one alcoholic beverage daily. She appears thin. Examination shows a 2-cm, nontender lymph node in the right supraclavicular area. Examination shows no other abnormalities. An x-ray of the chest shows a large right lower lobe density. A CT scan of the chest shows a 7.5 x 7.5 x 6-cm right lower lobe mass with some scattered calcifications. The lesion abuts the posterior chest wall without clear invasion. There are right lower peritracheal, precarinal, right hilar, and subcarinal lymph nodes. There is a 1.5-cm mass in the right adrenal gland. A biopsy specimen of the lung mass is most likely to show which of the following?', A. 'Mesothelioma', B. 'Metastatic adenocarcinoma of the breast', C. 'Multiple endocrine neoplasia', D. 'Non-small cell lung carcinoma'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 37:

'A 46-year-old woman, gravida 1, para 1, comes to the office because of a 2-week history of black discharge from her right nipple. The patient had mammography and ultrasonography of the breasts 2 months ago for evaluation of increased glandularity, palpated in the upper outer quadrant of the right breast, noted at her most recent annual examination. The studies showed likely benign findings with recommended follow-up in 6 months. Medical history is otherwise unremarkable and she takes no medications. BMI is 30 kg/m². Vital signs are normal. Palpation of the right breast discloses glandularity in the upper outer quadrant but no other masses. There is scant, black discharge from the right nipple. Which of the following is the most appropriate next step in diagnosis?', A. 'Ductography', B. 'Excisional biopsy of glandular tissue', C. 'Repeat mammography', D. 'Repeat ultrasonography of the right breast'

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Answer Option 1:

Final Answer: A

Answer Option 2:

Final Answer: A

Answer Option 3:

Final Answer: A

Answer Option 4:

Final Answer: A

Answer Option 5:

Final Answer: A

Answer Option 6:

Final Answer: A

Answer Option 7:

Final Answer: A

Answer Option 8:

Final Answer: A

Answer Option 9:

Final Answer: A

Question 38:

'A 37-year-old woman with AIDS comes to the physician because of a 1-month history of progressive diarrhea and a 1.8- kg (4-lb) weight loss. During the past week, she has had six large watery stools daily. She is currently receiving triple antiretroviral therapy. She is employed as a flight attendant and works regularly on domestic flights throughout the USA. She also flies to Asia at least once monthly. She is 163 cm (5 ft 4 in) tall and weighs 59 kg (130 lb); BMI is 22 kg/m². Her temperature is 37°C (98.6°F), pulse is 88/min, and blood pressure is 112/64 mm Hg. The abdomen is scaphoid. The remainder of the examination shows no abnormalities. Her CD4+ T-lymphocyte count is 400/mm³ (Normal≥500). Which of the following is the most likely causal organism?', A. 'Cryptosporidium parvum', B. 'Cytomegalovirus', C. 'Mycobacterium avium-intracellulare complex', D. 'Salmonella enteritidis'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 39:

'A healthy 22-year-old man participates in a study of glucose metabolism. At the beginning of the study, his serum glucose concentration is within the reference range. He consumes an 800-calorie meal consisting of protein, fat, and carbohydrates. He then sleeps through the night without additional food or drink. Twelve hours later, his serum glucose concentration remains within the reference range. Which of the following mechanisms is most likely involved in maintaining this man's serum glucose concentration?', A. 'Continued gut absorption of calories from the ingested meal', B. 'Glucose release from skeletal muscle', C. 'Glycogenolysis in the liver', D. 'Increased leptin release from adipose tissues'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 40:

'A previously healthy 22-year-old college student is brought to the emergency department by her parents 20 minutes after they observed her having a seizure. After the seizure, she was confused and had difficulty thinking of some words. She has had a headache, cough, and fever for 3 days treated with acetaminophen and dextromethorphan. Her temperature is 38.9°C (102°F). Neurologic examination shows diffuse hyperreflexia. On mental status examination, she is confused and has short-term memory deficits. She has difficulty naming objects and makes literal paraphasic errors. An MRI of the brain shows bitemporal hyperintensities. A lumbar puncture is done; cerebrospinal fluid analysis shows an erythrocyte count of 340/mm³, a leukocyte count of 121/mm³ (88% monocytes), and a protein concentration of 78 mg/dL. Which of the following is the most likely diagnosis?', A. 'Bacterial meningitis', B. 'Dextromethorphan intoxication', C. 'Herpes simplex encephalitis', D. 'HIV encephalopathy'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 41:

'A 40-year-old woman comes to the physician because of a 6-month history of increased facial hair growth. Her last menstrual period was 4 months ago. She is 165 cm (5 ft 5 in) tall and weighs 70 kg (154 lb); BMI is 26 kg/m². Her pulse is 80/min, and blood pressure is 130/82 mm Hg. Physical examination shows temporal balding and coarse dark hair on the upper lip and chin. Pelvic examination shows clitoral enlargement. Her serum testosterone concentration is increased. Serum concentrations of androstenedione, dehydroepiandrosterone, and urinary 17-ketosteroids are within the reference ranges. Ultrasonography of the pelvis shows a 12-cm ovarian mass. Which of the following best describes this mass?', A. 'Granulosa tumor', B. 'Ovarian carcinoid', C. 'Sertoli-Leydig tumor', D. 'Teratoma'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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Question 42:

'A 77-year-old female presents to the office for evaluation of a syncopal event that occurred while she was walking. Cardiac examination reveals a grade 3/6 systolic murmur, heard best at the right upper sternal border. There is radiation of the murmur into the neck. The valvular abnormality that most likely caused this episode is', A. 'aortic insufficiency', B. 'aortic stenosis', C. 'mitral regurgitation', D. 'mitral stenosis'

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Answer Option 1:

Final Answer: B

Answer Option 2:

Final Answer: B

Answer Option 3:

Final Answer: B

Answer Option 4:

Final Answer: B

Answer Option 5:

Final Answer: B

Answer Option 6:

Final Answer: B

Answer Option 7:

Final Answer: B

Answer Option 8:

Final Answer: B

Answer Option 9:

Final Answer: B

Question 43:

Three weeks ago a 45-year-old man was admitted to the hospital because of frostbite of both feet. He was treated by rapid rewarming and protective care of the feet. All the toes on the right foot have turned black. He has become slightly febrile and progressively more confused during the past few days. Examination discloses cellulitis in the midfoot. Which of the following is the most appropriate treatment?', A. 'Amputation', B. 'Application of topical collagenase', C. 'Debridement of necrotic skin over the toes', D. 'Hyperbaric oxygen'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 44:

'A 35-year-old man comes to the office because of 1-week history of mid low back pain that radiates down his right leg. The pain began after the patient lifted a heavy box onto his truck. He rates his current pain as an 8 on a 10-point scale. He has been unable to find a comfortable position and has been sleeping in a recliner. Medical history is unremarkable and he takes no medications. He has smoked one pack of cigarettes daily for the past 25 years, and he drinks a six-pack of beer on Friday and Saturday nights. BMI is 27 kg/m². He appears uncomfortable and stands during the physical examination. Vital signs are normal. Straight-leg raise test is positive on the right, with loss of right ankle reflex. The remainder of the physical examination discloses no abnormalities. Which of the following is the most likely explanation for this patient's symptoms?', A. 'Displacement of the nucleus pulposus', B. 'Hypertrophy of the facet joints', C. 'Osteophyte formation', D. 'Spondylolisthesis'

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Answer Option 1:

Final Answer: A

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Answer Option 2:

Final Answer: A

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Answer Option 3:

Final Answer: A

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Answer Option 4:

Final Answer: A

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Answer Option 5:

Final Answer: A

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Answer Option 6:

Final Answer: A

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Answer Option 7:

Final Answer: A

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Answer Option 8:

Final Answer: A

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Answer Option 9:

Final Answer: A

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Question 45:

'A 35-year-old man comes to the physician because of pain and swelling of his right arm where he scraped it on a tree branch 2 days ago. His temperature is 38.3°C (101°F). Examination of the right forearm shows edema around a fluctuant erythematous lesion at the site of trauma. The area is extremely tender to palpation. Which of the following is most likely the primary mechanism of the development of edema in this patient?', A. 'Disruption of vascular basement membranes', B. 'Increased hydrostatic pressure', C. 'Release of thromboxane', D. 'Separation of endothelial junctions'

=====

Answer Option 1:

Final Answer: D

=====

Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 46:

'A 22-year-old woman comes to the physician in October for a follow-up examination. She feels well. She has a 2-year history of type 1 diabetes mellitus controlled with insulin. She had a normal Pap smear 3 months ago and saw her ophthalmologist 6 months ago. Her 67-year-old grandmother has breast cancer. She is 168 cm (5 ft 6 in) tall and weighs 57 kg (125 lb); BMI is 20 kg/m². Her hemoglobin A1c is 6.2%, and fingerstick blood glucose concentration is 118 mg/dL. Which of the following health maintenance recommendations is most appropriate at this time?', A. 'Dietary modification for weight loss', B. 'Human papillomavirus testing', C. 'Mammography', D. 'Influenza virus vaccine'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 47:

'A 42-year-old man comes to the physician for a follow-up examination. Four months ago, he underwent repair of a Dupuytren contracture. Physical examination shows decreased range of motion in the affected hand. The patient is upset that his hand has not fully healed, and he files a malpractice suit against the physician. Which of the following is the most likely precipitating factor in this patient's decision to file a malpractice suit?', A. 'The patient's perception that the physician is incompetent', B. 'The patient's perception that the physician is uncaring', C. 'The patient's socioeconomic status', D. 'The physician's amount of experience in the medical field'

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Answer Option 1:

Final Answer: B

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Answer Option 2:

Final Answer: B

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Answer Option 3:

Final Answer: B

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Answer Option 4:

Final Answer: B

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Answer Option 5:

Final Answer: B

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Answer Option 6:

Final Answer: B

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Answer Option 7:

Final Answer: B

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Answer Option 8:

Final Answer: B

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Answer Option 9:

Final Answer: B

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Question 48:

'During a study of renal glomeruli, a healthy animal kidney is kept in a vascular bath preparation at a constant afferent arterial pressure of 100 mm Hg. If the efferent arteriole is constricted with a vascular clamp, which of the following Starling forces is most likely to change in the glomeruli?', A. 'Decreased filtration coefficient (Kf)', B. 'Decreased hydrostatic pressure', C. 'Decreased oncotic pressure', D. 'Increased hydrostatic pressure'

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Answer Option 1:

Final Answer: D

Answer Option 2:

Final Answer: D

Answer Option 3:

Final Answer: D

Answer Option 4:

Final Answer: D

Answer Option 5:

Final Answer: D

Answer Option 6:

Final Answer: D

Answer Option 7:

Final Answer: D

Answer Option 8:

Final Answer: D

Answer Option 9:

Final Answer: D

Question 49:

'A 30-year-old woman, gravida 2, para 0, aborta 1, at 28 weeks' gestation comes to the office for a prenatal visit. She has had one previous pregnancy resulting in a spontaneous abortion at 12 weeks' gestation. Today, her vital signs are within normal limits. Physical examination shows a uterus consistent in size with a 28-week gestation. Fetal ultrasonography shows a male fetus with no abnormalities. Her blood group is O, Rh-negative. The father's blood group is B, Rh-positive. The physician recommends administration of Rho', A. 'immune globulin to the patient. This treatment is most likely to prevent which of the following in this mother?', B. 'Development of natural killer cells', C. 'Development of polycythemia', D. 'Formation of antibodies to RhD'

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Answer Option 1:

Final Answer: D

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Answer Option 2:

Final Answer: D

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Answer Option 3:

Final Answer: D

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Answer Option 4:

Final Answer: D

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Answer Option 5:

Final Answer: D

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Answer Option 6:

Final Answer: D

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Answer Option 7:

Final Answer: D

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Answer Option 8:

Final Answer: D

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Answer Option 9:

Final Answer: D

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Question 50:

'A 46-year-old man with Marfan syndrome, aortic insufficiency, and mitral regurgitation comes to the emergency department because he has had severe substernal chest pain for the past 3 hours. He describes the pain as tearing in quality and radiating to the neck. One week earlier he experienced similar but less severe chest pain and treated himself with aspirin. Which of the following is the most likely underlying cause for his worsening symptoms?', A. 'Acute bacterial endocarditis', B. 'Acute myocardial infarction', C. 'Dissection of the aorta', D. 'Esophageal reflux with spasm'

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Answer Option 1:

Final Answer: C

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Answer Option 2:

Final Answer: C

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Answer Option 3:

Final Answer: C

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Answer Option 4:

Final Answer: C

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Answer Option 5:

Final Answer: C

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Answer Option 6:

Final Answer: C

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Answer Option 7:

Final Answer: C

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Answer Option 8:

Final Answer: C

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Answer Option 9:

Final Answer: C

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