

Midterm

1. What joints of the hands are usually spared in Rheumatoid Arthritis?

- A. DIP
- B. PIP
- C. MCP
- D. Wrist

2. A 32-year-old woman has a history of chronic diarrhea and gallstones and now has rectovaginal fistula. Which of the following is the most likely diagnosis?

- A. Crohn disease
- B. Ulcerative colitis
- C. Systemic lupus erythematosus
- D. Laxative abuse

3. A 78-year-old is noted to have fever and chills, decreased mentation, tachycardia, and right lower quadrant abdominal tenderness and guarding. Which of the following is the most likely diagnosis?

- A. Ruptured diverticulitis
- B. Meningitis
- C. Ruptured appendicitis
- D. Ischemic bowel
- E. Urosepsis

4. A 15-year-old adolescent girl has elevated liver enzymes and a positive antinuclear antibody (ANA). Choose the one cause (A-G) that is probably responsible for the patient's presentation.

- A. Wilson disease
- B. Hematochromatosis
- C. Primary biliary cirrhosis
- D. Sclerosing cholangitis
- E. Autoimmune hepatitis
- F. Alcohol-induced hepatitis
- G. Viral hepatitis

5. A 37-year-old woman is noted to have gallstones on ultrasonography. She is placed on a low-fat diet. After 3 months she is noted to have severe right upper quadrant pain, fever to 38.8°C, and nausea. Which of the following is the most likely diagnosis?

- A. Acute cholangitis
- B. Acute cholecystitis
- C. Acute pancreatitis
- D. Acute perforation of the gallbladder

6. A 38-year-old man with a 12 pack of beer per day alcohol history presents with jaundice, ascites, and dark urine. His laboratory results are AST 350 U/mL, ALT 150 U/mL, alkaline phosphatase 120 U/mL, total bilirubin 25 mg/dL, direct bilirubin 12 mg/dL, and albumin 2.1 g/dL. Choose the one diagnosis below, that best matches with the most likely clinical situation.

- A. Hemolysis

- B. Alcoholic hepatitis
- C. Gilbert disease
- D. Pancreatic cancer
- E. Gallstones
- F. Primary sclerosing cholangitis

7. A 70-year-old woman presents with a 4-week history of low back pain, generalized weakness, and a 15-lb weight loss over the last 2 months. Her medical history is unremarkable, and her examination is normal except that she is generally weak. Initial laboratory tests reveal an elevated sedimentation rate, mild anemia, creatinine level 1.8 mg/dL, and calcium level 11.2 mg/dL. Which of the following is the most likely diagnosis?

- A. Osteoporosis with compression
- B. Renal failure with osteodystrophy
- C. Multiple myeloma
- D. Lumbar strain
- E. Osteomyelitis

8. A 30-year-old man is noted to have an acutely swollen and red knee. Joint aspirate reveals numerous leukocytes and polymorphonuclear leukocytes, but no organisms on Gram stain. Analysis shows few negatively birefringent crystals. Which of the following is the best initial treatment?

- A. Oral corticosteroids
- B. Intra-articular corticosteroids
- C. Intravenous antibiotic therapy
- D. Oral colchicine

Cases

1. A 48-year-old man comes to your office complaining of severe right knee pain for 8 hours. He states that the pain, which started abruptly at 2 AM and woke him from sleep, was quite severe—so painful that even the weight of the bed sheets on his knee was unbearable. By the morning, the knee had become warm, swollen, and tender. He prefers to keep his knee bent, since straightening the knee causes the pain to worsen. He has never had pain, surgery, or injury to his knees. A year ago, he did have some pain and swelling at the base of his great toe on the left foot, which was not as severe as this episode, and resolved in 2 or 3 days after taking ibuprofen. His only medical history is hypertension, which is controlled with hydrochlorothiazide. He is a nonsmoker, and reports moderate social alcohol use. On examination, his temperature is 37.4°C, heart rate is 104 bpm, and blood pressure is 136/78 mm Hg. His head and neck examinations are unremarkable, his chest is clear, and his heart is tachycardic but regular, with no gallops or murmurs. His right knee is swollen, with a moderate effusion, and appears erythematous, warm, and very tender to palpation. He is unable to fully extend the knee because of pain. He has no other joint swelling, pain, or deformity, and no skin rashes.

What is the most likely diagnosis?

What is your next step?

What is the best initial treatment?

2. A 32-year-old nurse presents to your office with a complaint of intermittent episodes of pain, stiffness, and swelling in both hands and wrists for approximately 1 year. The episodes last for several weeks and then resolve. More recently, she noticed similar symptoms in her knees and ankles. Joint pain and stiffness are making it harder for her to get out of bed in the morning and are interfering with her ability to perform her duties at work. The joint stiffness usually lasts for several hours before improving. She also reports malaise and easy fatigability for the past few months, but she denies having fever, chills, skin rashes, and weight loss. Physical examination reveals a well-developed woman, with blood pressure 120/70 mm Hg, heart rate 82 bpm, and respiratory rate 14 bpm. Her skin does not reveal any rashes. Head, neck, cardiovascular, chest, and abdominal examinations are normal. There is no hepatosplenomegaly. The joint examination reveals the presence of bilateral swelling, redness, and tenderness of most proximal interphalangeal (PIP) joints, metacarpophalangeal (MCP) joints, the wrists, and the knees. Laboratory studies show a mild anemia with hemoglobin 11.2 g/dL, hematocrit 32.5%, mean corpuscular volume (MCV) 85.7 fL, white blood cell (WBC) count 7.9/mm³ with a normal differential, and platelet count 300,000/mm³. The urinalysis is clear with no protein and no red blood cells (RBCs). The erythrocyte sedimentation rate (ESR) is 75 mm/h, and the kidney and liver function tests are normal.

What is your most likely diagnosis?

What is your next diagnostic step?