Kaplan USMLE Step 1 prep: 4 cases involving patients’ hands

Over the years, the AMA has run dozens of example questions from Kaplan Medical. If you're preparing for the United States Medical Licensing Examination® (USMLE®) Step 1 exam, you might want to know which questions are most often missed by test-prep takers. We've compiled four cases from Kaplan Medical involving patients' hands, in one way or another. Each question comes with an expert explanation of the answer. You can check out all posts in this series.

The AMA selected Kaplan as a preferred provider to support you in reaching your goal of passing the USMLE® or COMLEX-USA®. AMA members can save 30% on access to additional study resources, such as Kaplan's Qbank and High-yield courses. Learn more.

Think you can answer these questions involving patients' hands? Find out now.

Predict the loss from injury

A 41-year-old woman comes to the physician because of a recent history of joint pain in her hands and knees, in addition to some mild weight loss and fatigue. She has a two-week history of swelling behind her left knee. She states that the swelling has been progressively growing, and she has pain and difficulty in flexing the knee. Her serum is positive for rheumatoid factor. Physical examination shows an erythematous, fluid-filled mass in the left lateral popliteal fossa overlying the tendon of the biceps femoris. During aspiration of the cyst, a structure immediately adjacent to the tendon is injured. Which loss is most likely to occur in this patient?

Which test for patient with rheumatoid arthritis?

A 54-year-old man comes to the physician for a follow-up examination because of
progressive rheumatoid arthritis unresponsive to high dose nonsteroidal anti-inflammatory drugs. Treatment with prednisone and hydroxychloroquine was started six weeks earlier. The patient is concerned about steroid-induced osteoporosis, because his father, a type 2 diabetic, recently fell and broke his hip. Laboratory studies and a dual energy x-ray absorptiometry test of the spine and hip are ordered to address the patient's concerns. What additional testing would be recommended for this patient?

A man's left hand complications

A 24-year-old man who is a construction worker comes to the physician because of awkwardness in using his left hand. He reports that two months ago he fell on his outstretched hand and landed on the heel of the hand. Physical examination shows that the fourth and fifth fingers are extended at the metacarpophalangeal joints and flexed at the interphalangeal joints. What additional finding is most likely to be seen on physical examination?

Which serum marker will be found?

A 62-year-old woman with a history of arthritis comes to the physician for follow-up examination. Physical examination of the hands shows decreased range of motion bilaterally and marked ulnar deviation of the fingers. An x-ray shows joint erosions. She tells the physician that she recently had seven dental cavities filled, which was unusual, because she has had very few dental problems in the past. Physical examination shows asymmetrical bilateral parotid gland enlargement. Which serum marker is most likely to be found in this patient?

For more prep questions on USMLE Steps 1, 2 and 3, view other posts in this series.