

RADIOLOGY QUIZ

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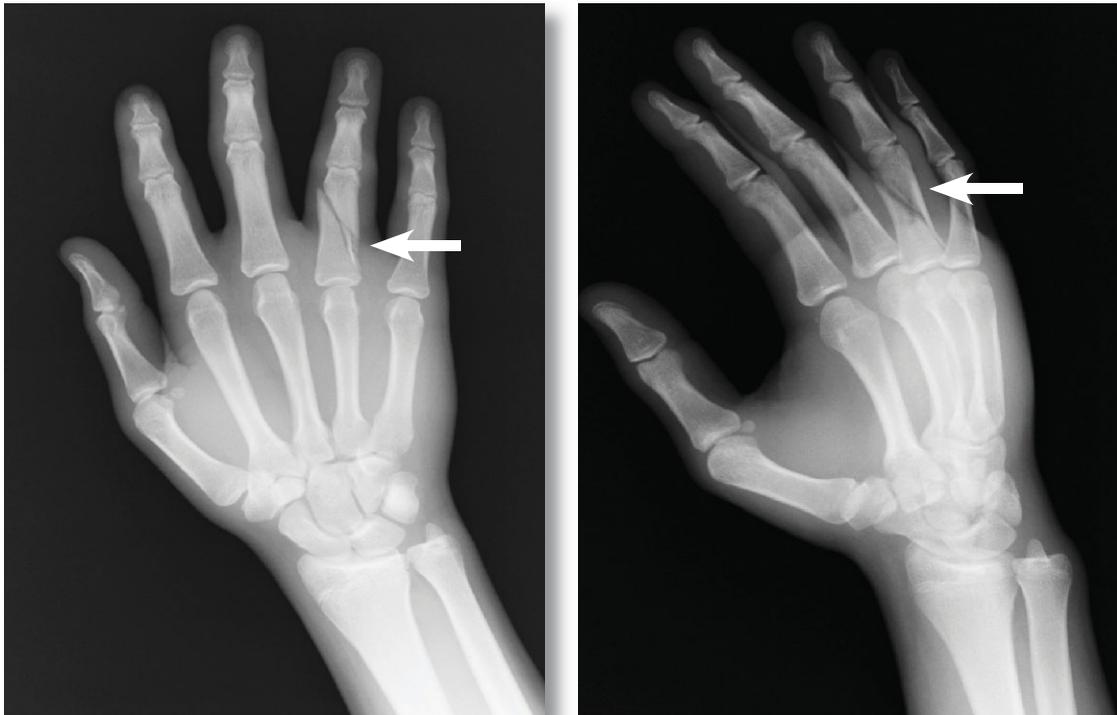
PROBLEM



➤ A 16-year-old boy presents to your urgent care center a day after he fell on his right hand. He complains of severe pain and swelling in that hand. Initially, the patient thought he had dislocated his finger and tried unsuccessfully to reduce it on his own. What is your interpretation of these views of his hand?

Turn page for answer ➤

ANSWER



➤ The radiograph reveals a spiral fracture of the proximal phalanx of the right fourth digit. When examining a patient with a fracture to the phalanx, it is important to assess for malrotation. In this case, radiography revealed a reasonably aligned fracture. However, when the patient attempted to close his fist during the exam, the fourth digit deviated significantly toward the ulnar aspect of the hand. This represented malrotation of the fourth digit. Immediate treatment for this injury included ice, ulnar gutter splinting, pain medications, and referral to orthopedic surgery for surgical fixation. If malrotation had not been present, the fracture would have been treated with a protective splint for 1 to 2 weeks followed by dynamic finger splinting for another 2 weeks. Repeat radiographs should be completed at 7 to 10 days to document maintenance of fracture reduction.¹

REFERENCE

1. Bednar MS, Light TR. Hand surgery. In: Skinner HB, ed. *Current Diagnosis & Treatment in Orthopedics*. 4th ed. New York, NY: McGraw-Hill; 2006:535-596.

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