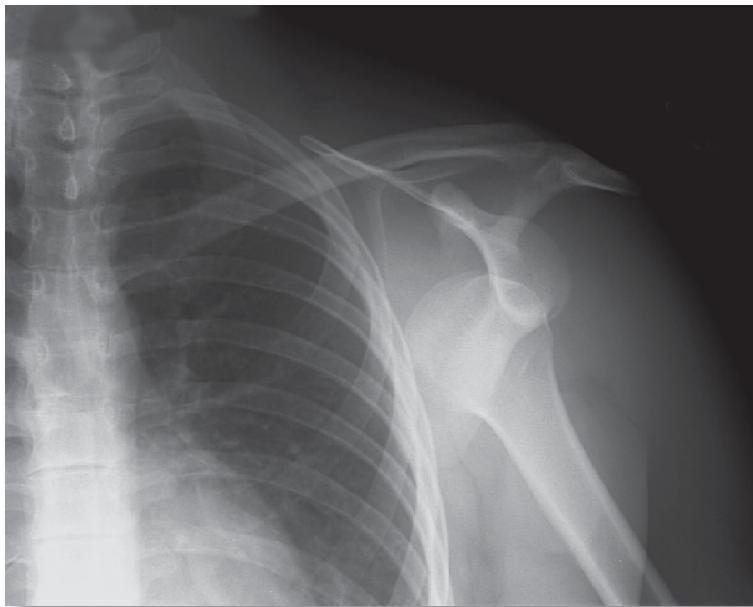


RADIOLOGY QUIZ

By Brian L. Patterson, MD, J. Michael Ray, MD, and Amit Varma, MD

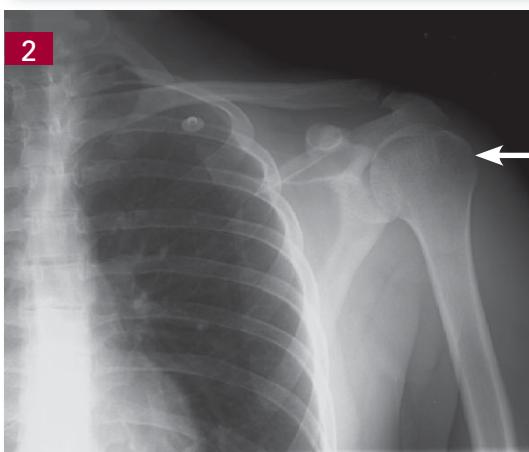
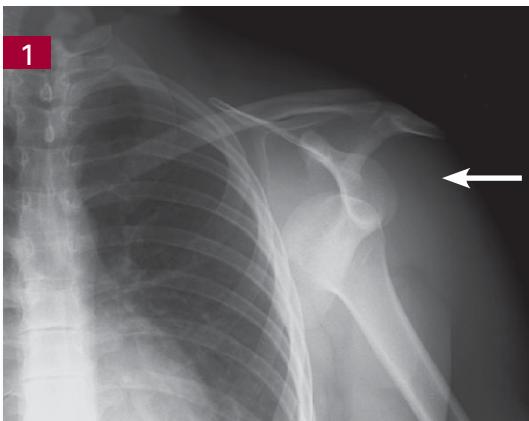
PROBLEM



A 25-year-old man presents to your urgent care center with severe left shoulder pain that began during a weightlifting session. During the examination, the patient holds his left arm close to his body and is unable to move his arm at the shoulder without pain. What is your interpretation of this view of his shoulder?

Turn page for answer

ANSWER



☞ The patient has an anterior dislocation of the left shoulder with the left humeral head in a subcoracoid location (Figure 1). Shoulder dislocations are the most common dislocations in the body, with anterior dislocations representing approximately half of all major joint dislocations.¹ Anterior dislocations usually occur during abduction and external rotation of the upper extremity.

When shoulder dislocation is suspected, anteroposterior shoulder films with internal and external rotation should be obtained. In addition, scapular Y images, which are useful in detecting a posterior dislocation, are indicated.

Patients with a previous glenohumeral dislocation are prone to a future dislocation in the same shoulder.² Reinjury is facilitated by two distinct lesions that are caused by a glenohumeral dislocation: a *Bankart lesion*, which occurs when the labrum of the anterior glenoid rim is torn, and a *Hill-Sachs lesion*, which is a fracture of the posterolateral aspect of the humeral head.³ The latter develops when the humeral head dislocates over the anterior edge of the glenoid and the sharp edge of the glenoid “digs” into the humeral head, creating a compression fracture.

Treatment for anterior dislocations consists of immediate reduction (applying traction to the affected extremity while the patient is lying on the table in the prone position). Films should be obtained to confirm reduction (Figure 2). Treatment also includes rest, ice, analgesic medications, and immobilization with a sling for at least 2 weeks. Gentle range-of-motion exercises may be initiated after 2 weeks, increasing as tolerated. Full healing of the surrounding tissues occurs within 6 weeks. The patient should not return to contact sports until full range of motion has been restored.

REFERENCES

1. Simon RR, Koenigsknecht SJ. The shoulder and upper arm. In: *Emergency Orthopedics: The Extremities*. 3rd ed. Norwalk, CT: Appleton & Lange; 1995:392-396.
2. Seade EL, Josey R. Shoulder dislocation. <http://emedicine.medscape.com/article/93323-overview>. Accessed September 21, 2009.
3. McMahon PJ, Kaplan LD. Sports medicine. In: Skinner H, ed. *Current Diagnosis & Treatment in Orthopedics*. 4th ed. The McGraw-Hill Companies, Inc; 2006:163-220.

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