

Case reports

Scapular body stress fracture—a case report

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Submitted 97-02-22. Accepted 98-09-29

A 68-year-old woman underwent left total knee replacement for osteoarthritis. She began partial weight-bearing ambulation with a walker 2 days following surgery. During the first week, she complained of posterior right shoulder pain, which was partially relieved by a corticosteroid injection in the subacromial space. 2 weeks after operation, she felt a painful snap in her right shoulder while reaching up and forward in occupational therapy. Radiographs revealed a minimally displaced transverse fracture of her right scapula. A retrospective evaluation of her admission chest radiograph showed classic findings of a stress fracture. Subsequent bone scan showed uptake consistent with the diagnosis of a healing fracture. She was treated with a sling and pendulum exercises. Within 3 weeks, she was pain-free and radiographs revealed progressive signs of healing. She had no other health problems. A medical evaluation for an occult malignancy was negative. She had used a cane in her right hand for 3 months before surgery and had been totally dependent on the cane for 6 weeks before

surgery. In the 3 months before surgery, she did not fall or sustain any direct trauma to her shoulder or upper arm.

Discussion

Nontraumatic fractures of the scapula are rare (Ada and Miller 1991, Imatani 1975, Wilber and Evans 1977, Guttentag and Rehtine 1988). Case reports have been published in which the scapular fracture was secondary to electric shock or seizures (Tarquino et al. 1979, Matthews et al. 1983, Wertheimer and Mogan 1990). All of these patients had osteodystrophy.

Two case reports have been published to date about scapular stress fractures at muscle attachments. One involved an assembly line worker whose job entailed repetitive overhead movements of the affected side (Brower et al. 1977). The resultant fracture was at the origin of the teres minor. The other report concerns a jogger carrying weights while running (Velvolu et al. 1988). This patient's fracture was at the origin of the supraspinatus. The last two are the only isolated scapular body-stress fractures reported to date (Deltoff and Bressler 1989, Ho et al. 1993). These occurred in a 32-year-old man who had just begun a vigorous exercise program and a 41-year-old male truck driver whose job involved heavy lifting.

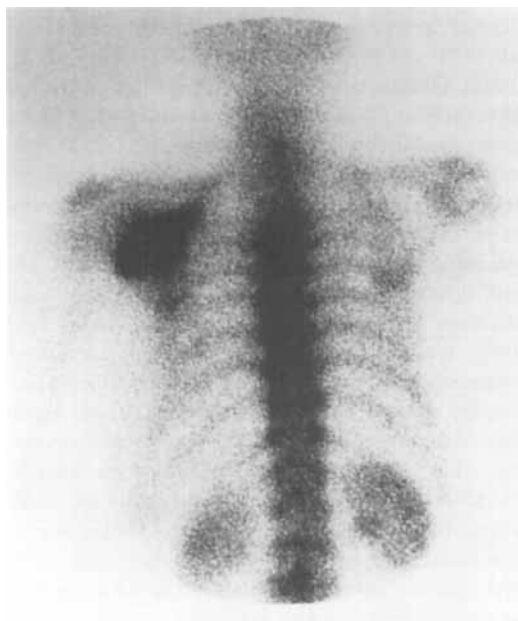
The mechanism of injury is repeated localized microtrauma in bone. The prognosis is good, with full recovery of shoulder motion.



Radiograph of shoulder shortly after the painful snap during occupational therapy.



Admission chest radiograph.



Subsequent bone scan showing increased uptake in the scapular body, consistent with the stress fracture.

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Extension restriction of the elbow caused by a synovial fold—a report on 2 athletes

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Submitted 98-03-25. Accepted 98-08-11

Case 1

A male judo expert aged 17 years was referred because of a progressive extension restriction with pain (flexion +135°, extension -50°) of the right elbow for a few months. The patient reported no previous trauma and conventional radiographs were normal. CT arthrography showed a thick synovial fold originating from the wall of the posterolateral capsule to the olecranon fossa. Intraarticular injection of lidocaine resulted in normal motion and complete pain relief for 2 hours. Under general anesthesia, motion of the elbow was normal. The olecranon fossa was exposed through a posterior approach. The synovial fold was 1 × 2 × 3 cm and impinged between the olecranon and its fossa on extension. The fold was excised and histologic examination showed chronic hypertrophic fibrous synovitis. 1 month after surgery, the patient had

normal elbow motion without pain and had returned to his usual activities.

Case 2

A male gymnast 15 years of age was examined in our clinic because of mild snapping and pain on extension of his left elbow for 10 months, without previous trauma. The snapping occurred with full extension and resulted in an inability to perform handstands. There was no swelling or warmth. The elbow snapped on full extension with pain. The snapping phenomenon was clearly palpable at the humero-ulnar joint. Conventional radiographs and arthrography were normal. Under general anesthesia, the snapping phenomenon persisted. A posterior ulnar arthrotomy revealed a synovial fold surrounding the olecranon. The fold impinged between the olecranon and its fossa in exten-