The patient was a 21-year-old man who was currently enrolled in a military academy. He was seen by a physical therapist in a direct-access capacity for a chief complaint of right shoulder fatigue and discomfort that was present for the past week. There was no history of right shoulder trauma, and the symptoms were insidious in onset. The patient was right-hand dominant, and his symptoms limited his ability to participate in mandatory intramural athletic activities and weight lifting.

Visual observation revealed marked atrophy of the right infraspinatus muscle. Active range of motion of the right shoulder and cervical spine was within normal limits, with mild pain noted with right shoulder elevation at end range. Strength testing revealed moderate weakness of the right shoulder external rotators and abductors, which were not limited by pain. Aside from right shoulder muscle weakness, all other neurologic examination findings were normal, which included sensation, reflex, motor, and upper-limb tension testing. Special tests for right shoulder instability and labral pathology were negative.

Due to marked atrophy and weakness with no history of injury, an orthopaedic surgeon was consulted and diagnostic imaging was requested. Right shoulder radiographs demonstrated a relatively high and posterior position to the humeral head (FIGURE 1, available at www.jospt.org). Magnetic resonance imaging revealed a posterior labral tear with a large, 3.1-cm multiloculated paralabral cyst, which extended into the spinoglenoid and suprascapular notches, likely resulting in significant compression of the suprascapular nerve (FIGURE 2) and mild supraspinatus and infraspinatus edema. The patient subsequently underwent arthroscopic labral repair and decompression of the suprascapular nerve, and resumed full military and athletic participation 6 months following surgery without any limitations or complaints of pain.

Posterior Labral Tear With a Paralabral Cyst Causing Suprascapular Nerve Compression


FIGURE 2. Axial T2-weighted, fat-saturated magnetic resonance images of the right shoulder demonstrating a posterior labral tear (white arrow) with a large multiloculated paralabral cyst (orange arrows), which extended into the spinoglenoid (left) and suprascapular (right) notches, likely resulting in significant compression of the suprascapular nerve.

References


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