Subscapularis Injury: Diagnosis and Treatment

By Todd Turnbull, DC, CCSP

The subscapularis muscle is an internal rotator and therefore is overused by almost every patient, especially those involved in throwing sports such as baseball. When a patient complains of shoulder pain, this is usually one of the factors that causes shoulder dysfunction.

Symptoms

The most common area of complaint is along the anterior humeral head or just a generalized region of pain in the shoulder joint. The onset of pain can be either acute, due to a specific mechanism of injury, or a gradual chronic condition that slowly develops. Strain can occur due to sleeping on the involved side, excessive throwing or a fall that traumatizes the shoulder.

Diagnosis

Evaluate shoulder range of motion bilaterally by having the patient elevate both elbows to horizontal. Have the patient internally rotate both forearms and look for a loss of end-range motion and/or an internal rotation of the whole scapula. Next, muscle test bilaterally and note the deficiency of the involved subscapularis.

Treatment

The subscapularis originates along the medial border of the anterior surface of the scapula and inserts into the lesser tubercle of the humerus. There are several approaches to correcting the subscapularis. Cross-fiber massage, instrument-based adjusting and/or contract, relax and stretch principles can all be utilized to obtain good results.

Cross-fiber massage of the belly can be accomplished by the doctor sliding their fingers into the axilla until the subscapularis muscle is found (usually an uncomfortable procedure for the patient). Adjusting instruments can target the origin while the patient’s arm is externally rotated. Contract, relax and stretch protocols tend to be less uncomfortable, but more time-consuming. Post-treatment evaluation should note increased strength and range-of-motion function and decreased pain.
Rehabilitation

Resistance-band strengthening exercises (multiple sets of 15 to 20 repetitions) should be incorporated a minimum of three times per week. I prefer that my patients first work their good side and then train the injured side.

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