

Labral Tests for the Shoulder Are Not Reliable

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Practitioners evaluating the cause of shoulder pain and instability rely on particular tests to determine if a labral tear is responsible. The test for a superior labral anterior-posterior (SLAP) lesion, discussed in my Sept. 13 article, does not appear to be as valid as the author of the test claimed; the same appears true with respect to some of the other tests we commonly use, such as the O'Brien, crank and anterior slide tests. These tests have been accepted as reliable and are found in practically all textbooks on the shoulder.

I recently read two studies in the *American Journal of Sports Medicine*,^{1,2} that showed these labral tests were also positive for shoulder conditions, such as impingement, rotator cuff tears and acromioclavicular sprain. The labrum was normal on MRI or arthroscopic examination. Even using multiple labral tests on a patient did not increase diagnostic accuracy.

What a blow! Here I am, pontificating on the shoulder, saying there is "probably a labral tear," when I should be saying there is a slight chance of a labral tear! Performing these tests and feeling for a click or pain, or asking if the pain is deep-seated, is not reliable.

Stetson and Templin² evaluated the crank and O'Brien tests, used to detect glenoid labral tears of the shoulder. They stated that the authors of these tests indicated high sensitivity ratings, and that "there has been no verification or duplication of such results (high sensitivity) by any independent examiners." "Sensitivity" of a test is defined as the probability that patients who truly should have the positive response have that response when the test is performed. "Specificity" of a test is defined as the probability that patients who should truly have a negative response, express a negative response when the test is performed.

As far as the clinician is concerned, "positive predictive value" (PPV) is probably the most important variable. PPV is defined as the probability that a patient who receives a positive test result will truly have a positive response (the actual pathology tested for).³

Stetson and Templin used diagnostic shoulder arthroscopy and magnetic resonance imaging on 65 patients with shoulder pain (average duration of pain: 12 months). Patients had symptoms of night pain, pain in the overhead position, and popping, catching or locking of the shoulder. The mechanism of injury included falls; lifting a heavy object; a direct blow; repetitive overhead activity; traction and pulling injuries; or insidious onset. The authors concluded that none of the above tests were specific for SLAP lesions.

We are taught to rely on functional tests to determine what is going on in our bodies, and accepted orthopedic tests are, at times, proven wrong. For years, I have realized that most orthopedic tests are not very specific, and I have always appreciated functional tests that seem to stress a particular area. What other tests that we use are unreliable? This is why, if we think we have found the cause of a problem, and our treatment does not seem to be effective in a reasonable amount of time, we should rethink the issue.

References

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3. Butler DS. *The Sensitive Nervous System*. Adelaide, Australia; Noigroup Publications;2000:357-358.

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