RAPID RESEARCH

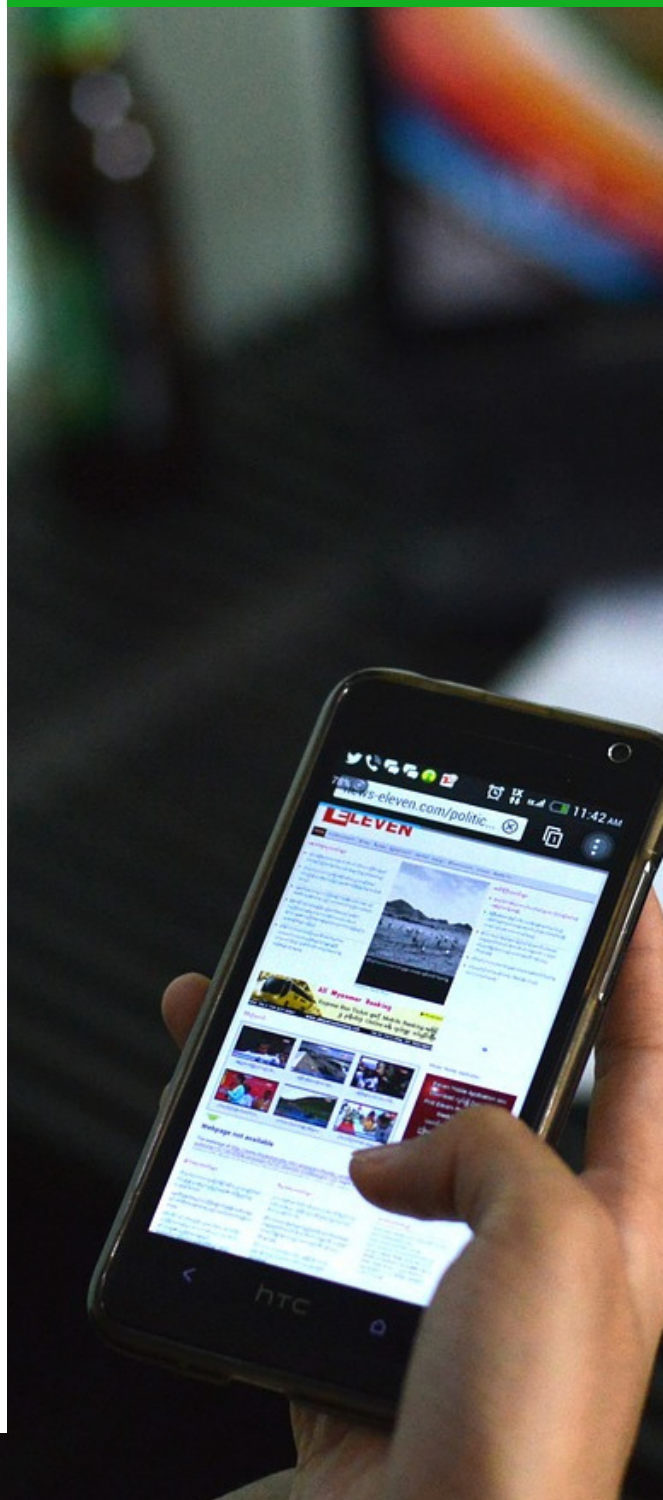
@physicaltherapyresearch

June 2021

Inside This Week:

Clinical Special Tests

- Arm Squeeze Test for Neck Pathology
- The Lever Test for ACL tears
- Diagnostic Accuracy of 15 Shoulder Special Tests



JUNE 2021

ARM SQUEEZE TEST FOR NECK PATHOLOGY

This study evaluated the diagnostic values of the Arm Squeeze Test. The test consists in squeezing the middle third of the upper arm to reproduce symptoms.

KEY FINDINGS

Positive in:
295/305 (96.7 %) of patients with cervical nerve root compression from C5 to T1.

Positive in asymptomatic subjects 14/350 (4 %).
compared to
Rotator cuff tear 35/903 (3.87 %)
Adhesive Capsulitis 3/155 (1.9%)
AC arthritis 1/55 (1.8%)

Calcifying tendonitis & GH arthritis 4/48 (8.33 %):
Sensitivity was 96%
Specificity ranged from 91-100%
Positive prognostic value 89-100%
Negative prognostic value 81-99%

Reliability:
Inter-observer 81%
Intra-observer 87%

MAIN TAKEAWAYS

The Arm Squeeze Test is a repeatable and rapid test which can be executed after an appropriate examination of the shoulder and cervical spine.

This test was found to have very good Specificity, Sensitivity, inter and intra tester reliability.

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THE LEVER TEST FOR ACL TEARS

This study updated previous research and assessed the sensitivity and specificity of the lever sign test for the diagnosis of acute ACL injuries, as compared to MRI.

KEY FINDINGS

Of 102 patients: **54 were surgical** & **48 were nonsurgical**

Lever sign overall **accuracy was 77%**
(63% sensitivity, 90% specificity)

Similar findings between patients under:

Anesthesia:
- Accuracy (77%)
- Sensitivity (86%)
- (Specificity (85%)

Awake:
- Accuracy (76%)
- Sensitivity (68%)
- Specificity (96%) .

Accuracy of the lever sign test was similar when performed on:
Female patients (75%)
Male patients (79%)

Accuracy was similar when performed by:
Undergraduate and medical students (84%)
Orthopedic residents and fellows (88%).

MAIN TAKEAWAYS

The results challenge the previously reported 100% sensitivity and specificity.

The lever sign test is easy to reproduce, regardless of training levels and independent of patient size.

Not affected by anesthesia, which cannot be stated for other ACL examinations.

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DIAGNOSTIC ACCURACY OF 15 SHOULDER SPECIAL TESTS

This research assessed diagnostic accuracy of 15 shoulder special tests for rotator cuff tears.

15 Special Tests Examined

1. Lift off test
2. Passive lift off test
3. Belly-press test
4. Belly-off sign
5. Bear hug
6. External rotation lag sign 0°
7. External rotation lag sign 90°
8. Hornblower's sign
9. Full can test
10. Drop arm test
11. Jobe's test
12. Neer's sign
13. Hawkin's sign
14. Bicipital groove tenderness
15. Speed's test.

KEY FINDINGS

Among the most accurate tests for **supraspinatus tears:**

Jobe's test
Sensitivity of 88%
Specificity of 62%
Likelihood ratio of 2.30.

Full can test
Sensitivity of 70%
Specificity of 81%.

Among the most accurate tests for **infraspinatus tears:**

External rotation lag signs at 0°
Specificity of 98%
Likelihood ratio of 6.06

Hornblower's sign
Specificity of 96%
Likelihood ratio of 4.81.

MAIN TAKEAWAYS

Jobe's test and full can test had high sensitivity and specificity for supraspinatus tears and Hornblower's sign performed well for infraspinatus tears.

In general, special tests described for subscapularis tears have high specificity but low sensitivity.

These data can be used in clinical practice to diagnose rotator cuff tears and may reduce the reliance on expensive imaging.

GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

Leave Review