RAPID RESEARCH

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Inside This Week:

Understanding Common Shoulder Injuries

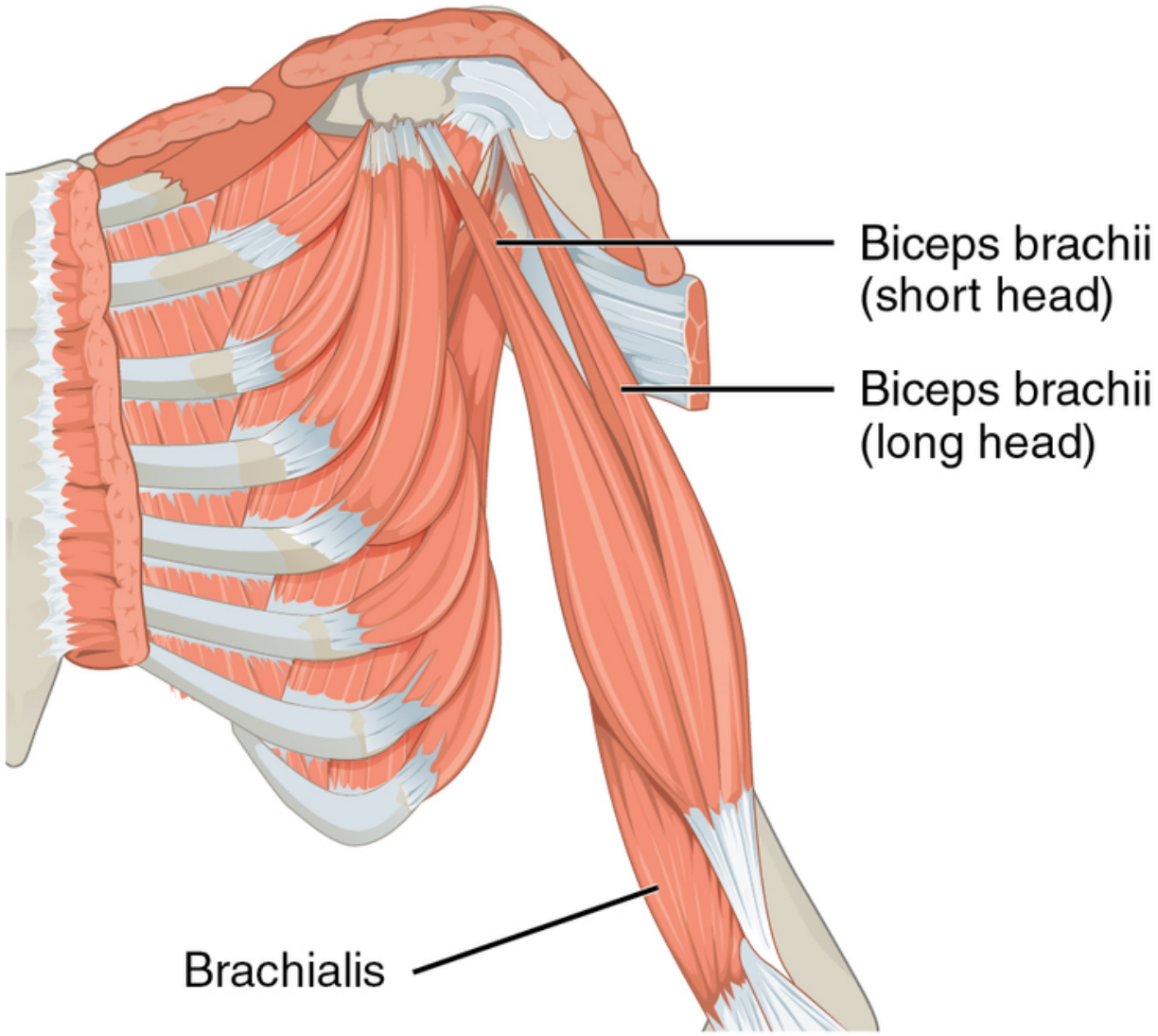
- Accuracy of Examination of Long Head of Biceps Tendon
- Understanding Long Head of Biceps at the Shoulder
- Risk Factors of Overuse Shoulder Injuries

ACCURACY OF EXAMINATION OF LONG HEAD OF BICEPS TENDON

JUNE 2023

Click for Full Text (Belanger et al. 2019)

This systematic review determined the diagnostic validity of high-resolution ultrasound and orthopedic special tests in diagnosing long head of the biceps tendon pathologies in patients with shoulder pain.



KEY FINDINGS

30 studies included:

High-resolution ultrasound (HRUS) is highly specific for diagnosing long head of the biceps tendon pathologies.

Pooled positive likelihood ratios (LR+) for dislocation and complete rupture are very high, indicating a large increase in the post-test probability of these conditions when the ultrasound is positive.

Pooled negative likelihood ratios (LR-) for dislocation and complete rupture are low, indicating a moderate decrease in the probability of these conditions when the ultrasound is negative.

Yergason's test is the only test with value, specifically for confirming proximal long head of the biceps tendon pathologies (except superior labrum anterior and posterior lesion), with a high specificity and moderate LR+.

MAIN TAKEAWAYS

HRUS shows potential for diagnosing dislocation and complete rupture, and tendinopathy of the LHBT.

Yergason's maneuver has slight value in diagnosing proximal LHBT pathology.

Inconsistent findings regarding the accuracy of ortho special tests (OSTs) for diagnosing SLAP lesions.

Combining OSTs and HRUS, may improve diagnostic accuracy for LHBT pathologies.

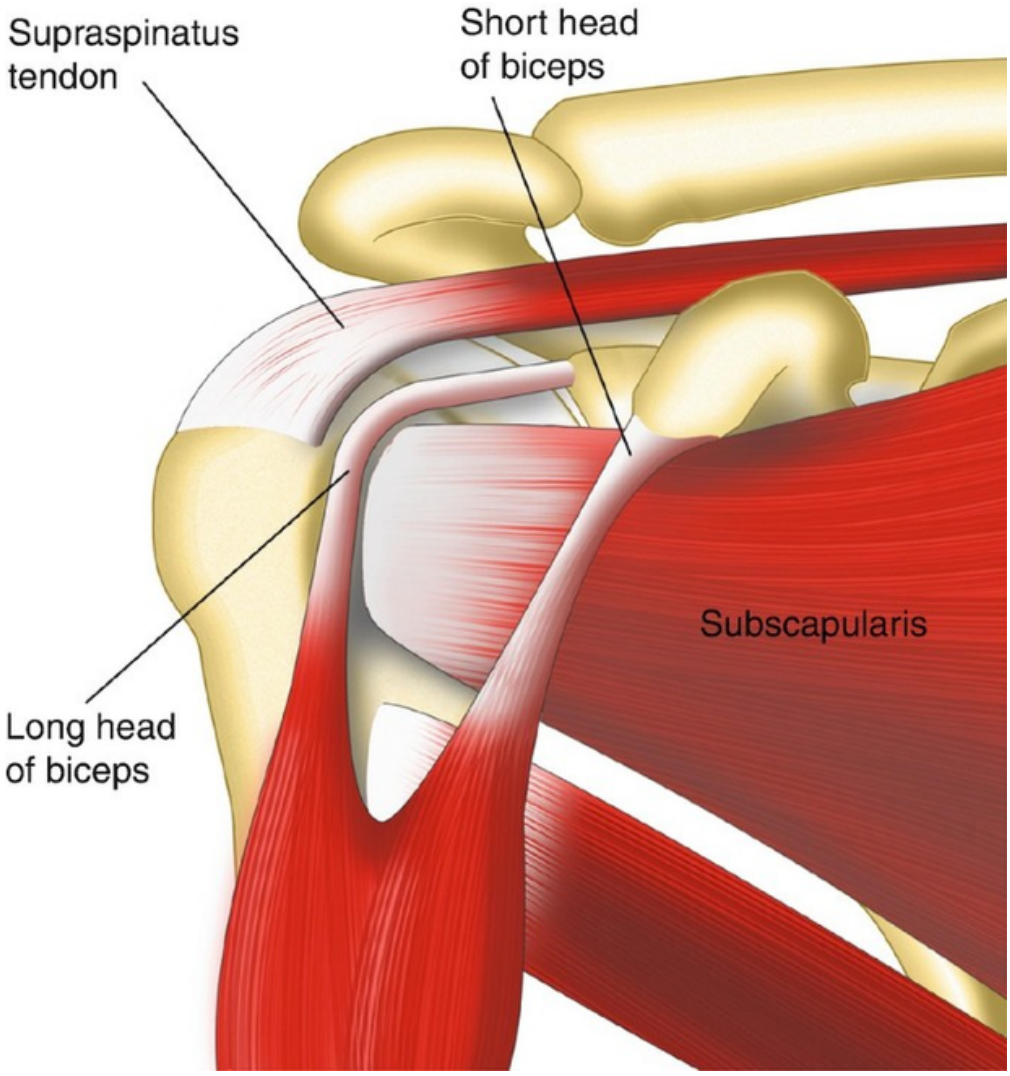
HRUS has advantages over other imaging methods, including no contraindications, high resolution, dynamic assessment, and cost-effectiveness in specific cases.

UNDERSTANDING LONG HEAD OF BICEPS AT THE SHOULDER

JUNE 2023

Click for Full Text (Diplock et al. 2023)

This scoping review explored the available literature to update our understanding of the long head of biceps (LHB) at the shoulder and to to identify emergent themes and knowledge gaps.



KEY FINDINGS

214 studies were included

Normal variations of the biceps can cause shoulder pain and instability.

(LHB) plays a significant role in shoulder stability and humeral head depression in individuals with rotator cuff failure or an absent LHB tendon.

LHB tendinopathy is associated with rotator cuff disease, LHBT instability, and occult rotator cuff tears, indicating a potential compensatory role.

Surgical Management Options:
Tenodesis shows higher overall constant scores and a lower incidence of Popeye deformity and cramping arm pain, while tenotomy is more cost and time-effective.

MAIN TAKEAWAYS

Anatomy:
Anatomical variations of LHBT, such as multiple origins and absence of the tendon, were associated with higher prevalence of shoulder pain and instability.

Pathology:
Association between LHB tendinopathy and rotator cuff pathology, LHBT instability, and occult Subscapularis tears. Suggesting a compensatory role of the LHB in pathological shoulders.

Assessment:
MRI and US have the best diagnostic accuracy

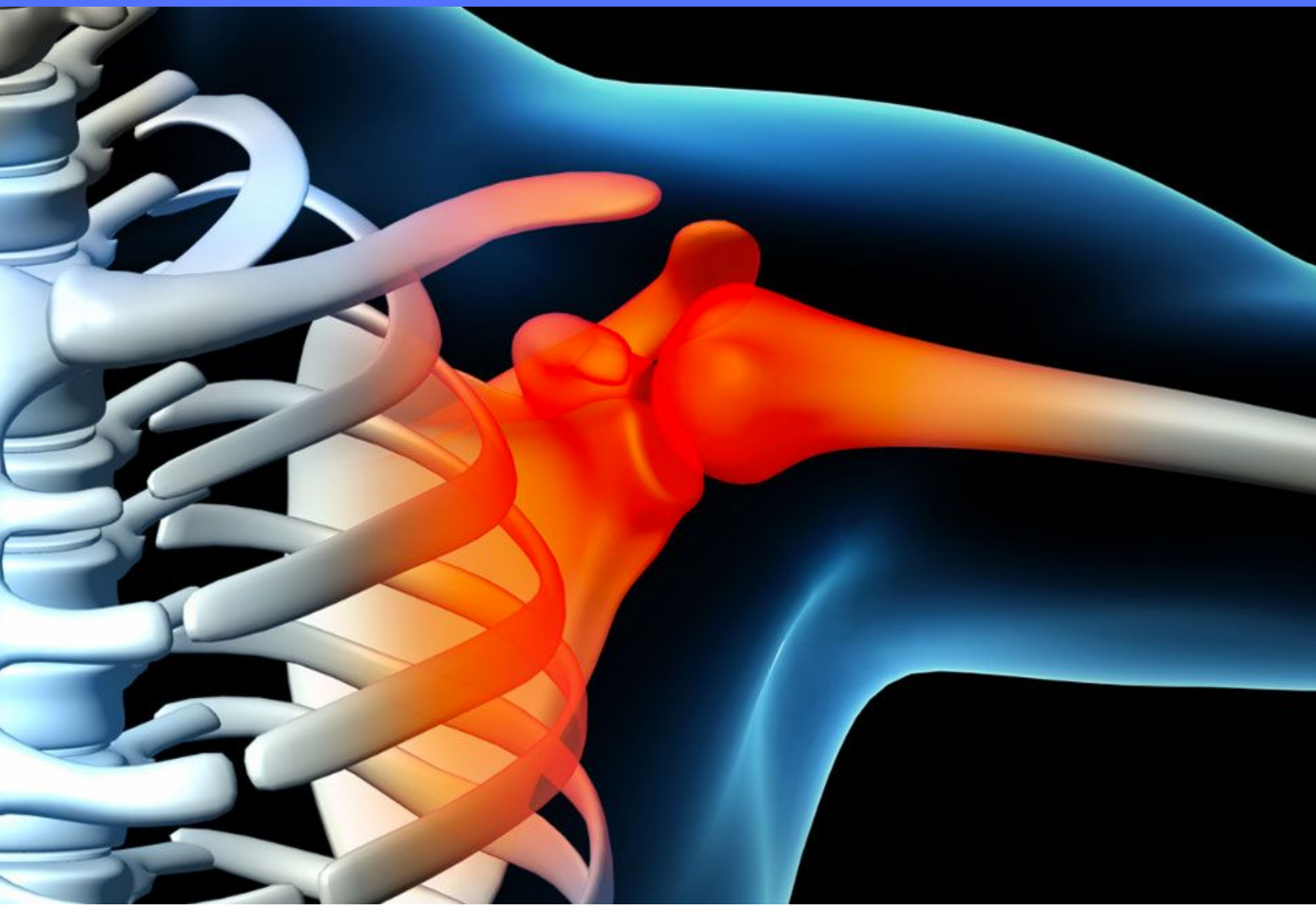
Non-Surgical Management:
Faster return to work but with decreased capacity and elbow/forearm strength compared to LHB tenodesis

RISK FACTORS OF OVERUSE SHOULDER INJURIES

JUNE 2023

Click for Full Text (Tooth et al. 2020)

This systematic review identified risk factors of overuse shoulder injury in overhead athletes, as described in the literature.



KEY FINDINGS

25 studies included;

Intrinsic factors such as previous injury, range of motion issues, rotator cuff weakness, and certain individual characteristics increase the risk of future shoulder injuries.

Factors like years of athletic practice, body mass index, sex, age, and level of play have a modest influence on injury risk.
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The relationship between scapular dysfunction and shoulder injuries is still controversial, although they are often associated.

Extrinsic factors like field position, practice conditions, time of season, and training load also contribute to the occurrence of shoulder injuries.

MAIN TAKEAWAYS

Risk factors include:
Glenohumeral internal rotation deficit, excess external rotation range of motion, scapular dysfunction, and inadequate training load management.

Strategies to address these risk factors include:
Sleeper stretches, proprioception and motor control exercises, pectoralis minor stretching, and strengthening of external and internal rotators.

Optimal management of training load, including frequency and intensity, is crucial in injury prevention.

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