POSTURE:
PAIN VS PERFORMANCE

HOW POSTURE AFFECTS THE PERFORMANCE OF THE ATHLETIC SHOULDER

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Why is posture important to a healthy, athletic shoulder and how does this relate to overhead athletes and performance? Let's look at the anatomy and mechanics of the human body to answer these questions.

If we evaluate a person from a profile view; ideally there would be an imaginary plumb line that passes through the ear and shoulder, behind the hip joint and slightly in front of the knee and ankle joint. In this resting position, the body is in perfect balance and allows the joints, muscles, and ligaments to function most efficiently.

Good posture, in relation to the shoulders and upper back, has the overhead athlete's shoulder blades slightly retracted (pulled back), which opens the chest and places the humeral head in an optimal position within the glenohumeral (shoulder) joint, allowing the arm to move about more freely during overhead activity.

Bad posture would have the overhead athlete's shoulders in a rounded/forward position; the chest muscles (pectoralis major and minor) are shortened, pulling the scapula (shoulder blade) forward. In turn, the amount of space for safe and effective movement at the glenohumeral joint is reduced resulting in potential impingement, inflammation and harm to the rotator cuff and stabilizing structures. This rounded/forward positioning of the shoulders also places postural muscles at a mechanical disadvantage. The middle and lower trapezius, rhomboids, infraspinatus and posterior deltoid are all placed in an abnormally lengthened position resulting in a less effective firing pattern, particularly while decelerating the arm during follow through. As a result, increased stress can potentially be seen at the shoulder causing injury to the athlete.

When addressing the rotator cuff muscles, the two methods of strengthening that are commonly used are unilateral (one arm at a time) and bilateral (both arms at the same time). Unilateral shoulder strengthening, though it has some benefits and should also be incorporated, only weakly addresses the postural muscles as the spinal stability is negated due to thoracic spine rotation. Symmetric bilateral strengthening targets the postural muscles more effectively by working through a stable thoracic spine, which facilitates complete scapular squeezing.

In conclusion, overhead athletes at every level should be involved in a comprehensive rotator cuff and equally important scapular and postural strengthening program. Crossover Symmetry is an effective postural strengthening solution that incorporates five exercises that specifically focus on retracting the shoulder blades, while addressing the rotator cuff and scapular stabilizers. As athletes consistently perform these exercises, shoulder strength, health, stability, and good posture are developed, ultimately improving performance and preventing injury.