The Role of the Scapular in Shoulder Pain

For most of us, when we think of the shoulder and problems with the shoulder, we tend to think mainly of the ball and socket joint and the rotator cuff muscles. The scapula or shoulder blade as it is commonly known, forms the socket of the ball and socket joint and acts as the primary coupling of the arm to the body.

Your scapula (shoulder blade) is highly mobile and can move in all directions, this motion is an integral part of what gives the shoulder joint such an amazing degree and variability of movement. Traditionally quite rigid rules around how and when the shoulder blade should be moving for correct shoulder function tended to be taught. With the benefit of recent research, we now understand that there is quite a large variety of movement strategies that people tend to learn and use quite well without issue and that there is no one size fits all approach to correct movement of the shoulder blade during use of the arm.

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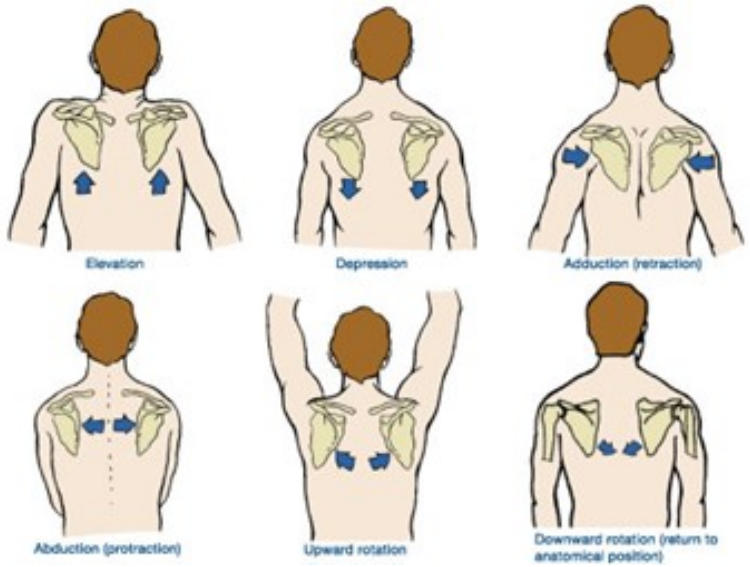

That said, being the foundation for movement of the ball and socket joint, there are a number of basic principles around appropriate scapular motion that apply in order for the shoulder to operate efficiently and pain free. With both forward elevation of the arm or raising the arm out to the side, an integral component of the movement is abduction and upward rotation of the shoulder blade (moving out to the side and tilting up). This motion of the blade acts to both increase the total amount of movement of the arm available and also to rotate the socket upwards to increase the stability of the joint, allowing more effective application of force through the arm.

There are dysfunctional postures and movements of the shoulder blade which commonly place the tissues of the shoulder joint under increased load and often lead to increased risk of shoulder injury. Two of the most common of these seen in the clinic are downward rotation of the scapula (or lack of upward rotation on elevation of the arm) and a forward tilting of the scapula.

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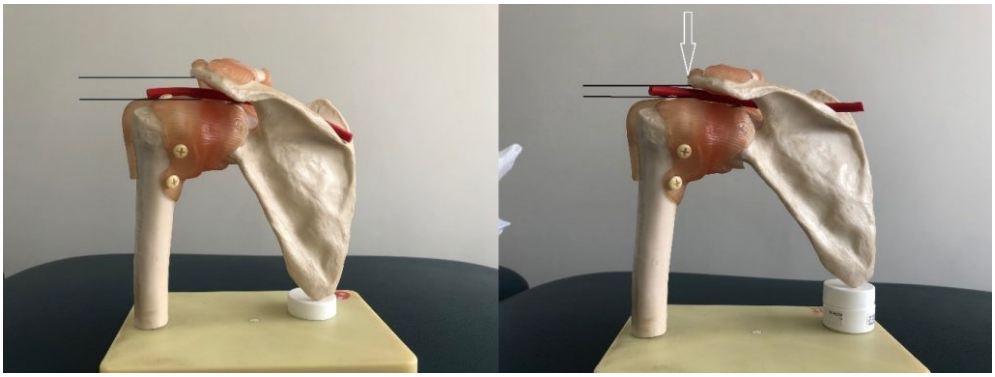

Normal Alignment (left) and Downward Rotation (right)

In both presentations, the dysfunctional resting position or lack of motion of the scapula with movement of the arm, results in a decrease in space between soft tissue and bony structures of the shoulder, increasing risk of compression and injury of the tissue. It is important to note that often the scapula may start in an apparent poor position, but moves appropriately into a good pattern of upward rotation once movement has commenced and this is much less of a problem in relation to shoulder injury. Commonly however, this poor starting position of the blade is coupled with a lack of appropriate upward rotation of the scapular through movement, resulting in increased compression of tissue in the top of the shoulder joint and injury.

Your physiotherapist can perform a number of movement correction tests which should demonstrated the significance of this apparent poor positioning or movement of the scapular in the development of your symptoms. Where this is significant contributor, there is generally an instant decrease in pain and improvement in function when the correction is applied though movement. From here you will be provided with a range of rehabilitation exercises aimed at retraining more optimal movement and position of the shoulder blade to keep you pain and injury free.

If you’re having shoulder issues, why not contact one of our expert physios at In Balance Physio and Pilates and we would be glad to help!

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