

Physical Therapy for the Shoulder Girdle

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The shoulder girdle complex can be a contributing factor for many patients experiencing shoulder pain. The shoulder girdle should be evaluated and incorporated into the plan of treatment for most shoulder conditions.

The shoulder girdle comprises the scapulothoracic joint, which incorporates the acromioclavicular (AC) and sternoclavicular (SC) joint to move the scapula. It is the combination of the scapulothoracic (AC + SC) and the glenohumeral joint (GH), also known as scapulohumeral rhythm, that allows maximum range of elevation to 180 degrees of the shoulder. Full range of motion requires 60 degrees of scapulothoracic or shoulder girdle motion and 120 degrees of GH motion. Therefore, structural dysfunction of the shoulder girdle complex may significantly limit a patient's range of motion and overall function.

Shoulder girdle dysfunction can include: restrictions in the participating joints, weakness or myofascial restrictions of surrounding musculature such as the upper & lower trapezius, serratus anterior and rhomboids that elevate and depress the scapula, paralysis of these muscles secondary to nerve damage, or occlusion of arteries and veins that supply blood to the complex. Secondary to its dynamic role in the proper movement of the shoulder complex, shoulder girdle dysfunction can be contributing factor to many different diagnoses such as shoulder impingement, rotator cuff tendonitis, frozen shoulder, and thoracic outlet syndrome.

Shoulder girdle rehabilitation can emphasize many different techniques depending on the patient's greatest functional deficits and the diagnosis. A treatment plan for the shoulder girdle will include specific therapeutic and range of motion exercises that will incorporate early in the process to facilitate overall active and passive range of motion. Neuromuscular re-education exercises can be implemented to enhance normal motion and postural awareness. Stretching of restricted musculature such as the pectoral muscles, upper trapezius, latissimus dorsi and rotator cuff will also help improve posture and aid in recovery of range of motion. Weakness and decreased endurance of the scapula and shoulder musculature will also be addressed with exercises including but not limited to isometrics, isotonic, and rhythmic stabilization. In many cases scapular strengthening may be the only activity the patient is able to perform as the shoulder itself is healing from a recent surgery or acute trauma. As the patient nears the end of the rehab work or sport simulation exercises should be added.

Other techniques to be implemented as part of a shoulder treatment plan include manual techniques such as trigger point and myofascial release, muscle energy, strain-counterstrain and passive range of motion. In conjunction with therapeutic exercise these techniques help to decrease muscle guarding, increase range of motion and improve circulation to the area. Manual techniques along with modalities such as ultrasound and electrical stimulation can often enhance recovery by decreasing pain. Educating the patient about the diagnosis, therapeutic exercise program, and management of symptoms are essential factors in their recovery.

Shoulder girdle rehabilitation is a major component in the recovery of the shoulder complex. Addressing the dysfunctions of the shoulder girdle will optimize healing and lower the reoccurrence of shoulder pain.