Shoulder Injury

For information on all types of injuries visit: http://www.cssphysio.com.au/Doctors/fordoctors.html



Conservative Management of Anterior Shoulder Instability

After acute or recurrent anterior shoulder dislocation, operative stabilisation is usually recommended, particularly in young and high-risk athletes. However there may be circumstances where a conservative approach is preferred. Reasons might include:

- The patient engages in low-risk sport
- They are over 25 years of age
- The patient wishes to get through the current competitive season prior to surgery (as Buddy Franklin did in 2008 while helping to win a premiership for Hawthorne).
- The patient refuses surgery.

The type and length of rehab will also be variable, depending on several factors including:

- Age of the patient
- Sporting and day-to-day demands on the shoulder
- Needs of the patient. In professional sport, it is not unknown for athletes to have very little time off after the injury.

For this reason, the following guidelines are based on stages rather than time-frames.

Acute phase

A sling is worn for 2-3 weeks. There is no evidence that longer-term use of the sling is of any additional benefit. However there is some evidence that use of a 'lateral rotation sling' may lead to better capsule-ligamentous healing. The problem with this approach is the cumbersome nature of the device leading to poor patient compliance.

Exercises can be commenced from day one. Scapular stabilization exercises can be performed in the sling. Neck exercises, mobilisation and massage can help to minimize the associated pain and muscle

spasm due to the acute injury. The sling can be removed up to 4 times per day for elbow and wrist / hand exercises.

In the older patient where there is a risk of stiffness developing, pendulum exercises in the sling can be commenced within the first one to two weeks.

Isometric exercises in neutral are also commenced as soon as pain allows, with the focus being on internal, external rotation, and flexion, extension strength. Active or passive abduction, extension and external rotation movements are avoided.

Early mobilisation phase

Passive and active range of motion, including flexion to 140°, and external rotation in neutral to 40°. Isometric & scapular exercises are progressed. Electrical stimulation can help to regain and reeducate rotator cuff muscle strength. Isotonic rotator cuff strength is also commenced during this stage, but abduction is avoided. Rhythmic stabilisation exercises in the lower and mid-ranges of flexion help with regaining dynamic control. Proprioceptive exercises help the patient to regain position sense and confidence.

Intermediate phase

Full flexion, full neutral external rotation, and horizontal flexion are encouraged, while mid-range abduction with some external rotation is gradually introduced. Active & resisted exercises in the scapular plane are allowed. Theraband and dumbbell exercises are pushed to help regain strength back towards 80% of normal. Rhythmic stabilisation and mid-range closed chain scapular exercises are progressed. General aerobic exercise is encouraged to regain fitness, and upper body ergometers can be introduced. Resisted exercises are initially high-rep,

low-load. Capsular stretches are also used, avoiding stretch to the anterior capsule.

Return to sport phase

Prior to return to sport, resistance exercises are progressed to higher load to help regain close to normal strength (90% plus). Dynamometry strength testing can help to determine the stage of muscular recovery. Plyometric drills are commenced, and progressed to sport-specific routines. Full range of motion, including abduction, is encouraged, while full capsular stretch in outer range is avoided. Overhead resistance exercises are used including military & bench press, lat. pull downs and pushups. However this needs to be closely supervised and loaded end-range positions avoided.

References:

- Cohen, B et al (2007). Shoulder injuries. In Brotzman, S & Wilk, K (eds). <u>Handbook of</u> <u>Orthopaedic Rehabilitation</u>, 2nd ed. Mosby, Phil.
- 2. Wilk, K et al (2009). Nonoperative rehabilitation for traumatic and congenital glenohumeral instability. In Wilk, K et al (eds) <u>The Athletes Shoulder</u>, 2nd ed, Churchill Livingstone, Phil.

Please contact us if you would like a printable copy of this document.

For information for doctors on physiotherapy management of all types of injuries visit: http://www.cssphysio.com.au/Doctors/fordoctors.html

Information for patients is at: http://www.cssphysio.com.au/forpatients.html



Concord Sport & Spine Physiotherapy 202 Concord Road Concord West, NSW 2138 Sydney, Australia.

Ph (02) 9736 1092

Email: info@cssphysio.com.au Web: www.cssphysio.com.au

Copyright © 2012 Paul Monaro. All Rights Reserved