# **Common Sports Injuries** (**Regarding Shoulder**)

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#### ABSTRACT:

**PURPOSE:** The main purpose of the study is to understand the different types of shoulder injuries or disruption. commonly being observed in the field of sports. Few injuries are mentioned here very specifically in relation to discipline or event. To amplify the intensity to acknowledge the scientific study, detailing of specific parts or areas i.e. muscles, ligaments, or tendons have been addressed here.

**KEYWORDS:** Shoulder dislocations, ACL Injuries impingement Rotator Cuff Tears, SLAP Tears, Biceps Injuries, Labral tears, Throwers Shoulder, Rugby Shoulder, Swimmers Shoulder, Fractures, Frozen Shoulder, Arthritis

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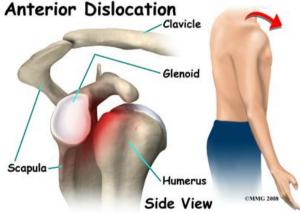
#### I. INTRODUCTION:

Common sporting injuries of the shoulder include dislocations, Acromioclavicular joint (ACJ) injuries, rotator cuff injuries, Labral tears, thrower's shoulder, biceps injuries, bursitis, and fractures. dislocations and ACJ injuries are more common in contact sports, such as rugby and wrestling, whilst rotator cuff tears and biceps lesions are common in sports involving explosive heavy weight-lifting. fractures around the shoulder are seen in sports involving crashes and fall from heights (of which there are many).

It is often quite difficult to adequately assess the severity of a shoulder injury and the structures damaged following sports injuries. as simple muscle strains look very similar to more serious injuries. Thus early assessment from a skilled Shoulder Therapist or Surgeon is essential for early appropriate management. This may involve x-rays and a special scan.

# **SHOULDER DISLOCATIONS:**

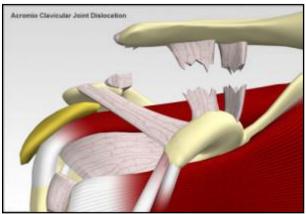
Because the shoulder is the most mobile joint in the body it is potentially unstable. it is therefore the most common joint to dislocate in the body. In some people, only minor trauma can cause the shoulder to 'pop out of the joint. If your shoulder does dislocate it needs to be 'put back as soon as possible and you then require physiotherapy.

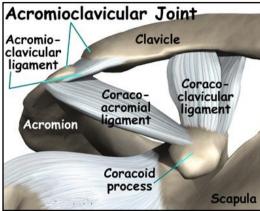


Over 50% of dislocations can recur. especially in young sports people Repeated dislocations lead to more instability and stretching of the shoulder joint, leading to long periods of sports and poor performance. We, therefore, recommend early surgical fixation. Keyhole repair offers the advantages of less pain, fewer complications, and an earlier return to sports.

# **ACROMIOCLAVICULAR JOINT INJURIES:**

The hard small lump you feel on the top of your shoulder is your Acromioclavicular Joint (ACJ). This joint is very important for overhead and throwing athletes. It is commonly sprained by repeated falls on the shoulder and tackling. It can also dislocate resulting in a more prominent painful lump on your shoulder.

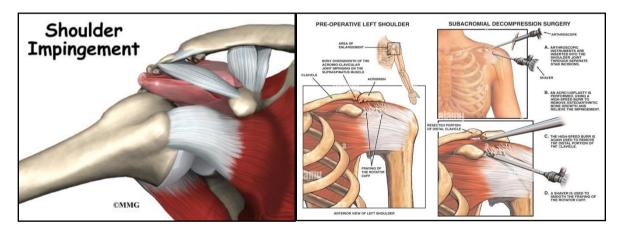




Sprained joints tend to cause more long-term pain than true dislocated joints. Injections and physiotherapy often improve the pain, but surgical removal of the joint is often required for persisting pain. This operation can be done by keyhole (arthroscopic) surgery, which has the advantages of less post-op pain and an early return to sport. Traditional open surgery can also weaken the shoulder, by dividing important ligaments. This is avoided with arthroscopic ACJ excision.

# **IMPINGEMENT SYNDROME:**

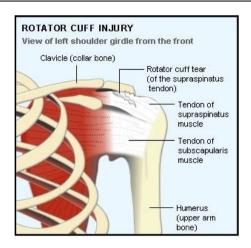
Subacromial Impingement (also known as Bursitis, impingement Syndrome, Rotator Cuff Tendinitis, Supraspinatus tendonitis) occurs with repeated use of your arm overhead and in older athletes who develop small bony spurs which trap the rotator cuff tendons above the main shoulder joint. Injections and physiotherapy often improve this condition, but repeated steroid injections should be avoided (especially in athletes).



Surgery involves keyhole 'spring-cleaning' of the subacromial bursa with the removal of the bony spur. This is called arthroscopic Subacromial Decompression.

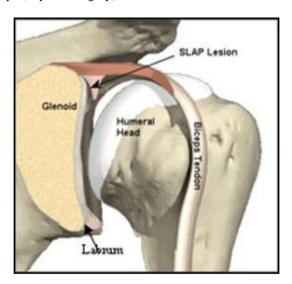
# **ROTATOR CUFF TEARS:**

The rotator cuff is a very important group of tendons that provide movement and stability for your shoulder. Therefore, when it is damaged pain and weakness can be significant. Tears caused by injury, especially in athletes, benefit from early repair because the tears can get bigger and more difficult to repair later on. Ultrasound scanning in the clinic has the advantage of being able to pick up tears early on and treat them appropriately. Rotator cuff repair can be done by keyhole surgery or open surgery. We repair most tears by keyhole surgery with the same success rate as open surgery.



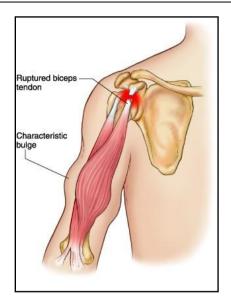
#### **SLAP LESIONS:**

Superior Labial Antero-Posterior (SLAP) tears of the shoulder are more common in overhead throwing, heavy lifting, and tackling sports. The biceps anchor in the shoulder is forcibly peeled or pulled off its bone attachment by a large pulling or peeling force. This can occur during a heavy lift, hard throw, tackle, or fall. The symptoms are pain deep inside the shoulder with lifting and sports. Some people complain of a clicking sensation and pain extending down the upper arm. it is often difficult to diagnose without actually looking inside the shoulder with an arthroscope (keyhole surgery), which is the recommended treatment for this.



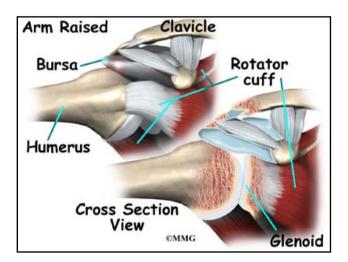
# **BICEPS INJURIES:**

The weak points of the biceps muscle are where the tendon attaches to the bone at the elbow and the junction between the biceps muscle and its tendon. The biceps usually ruptures at the elbow in athletes. You will usually feel a pop and notice a lump in the front of your arm. In athletes and manual workers prompt early repair is advisable, as it can be very difficult to repair these later. The biceps may also rupture at the shoulder - this is usually in older people and associated with rotator cuff tears - if surgery is needed the tendon is attached to the humerus (this is called a tenodesis). Biceps Pulley lesions sometimes occur in athletes and should be considered when there is pain on the top and front of the shoulder with normal scans. It is diagnosed by keyhole surgery done by an experienced shoulder surgeon.



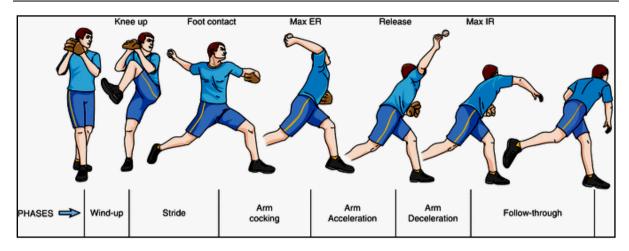
#### **LABRAL TEARS:**

The labium is a cushion surrounding the socket of the shoulder joint (similar to the meniscus of the knee). Likewise, it can tear like the knee meniscus with injuries to the shoulder. Labral tears usually follow falls or direct blows to the shoulder, but may also occur with throwing or pulling injuries. They can be diagnosed with MR Arthrograms (MR scan with special dye injected into the shoulder joint) and confirmed at keyhole surgery (arthroscopy). Large tears are associated with shoulder dislocations and are called Bankart tears.



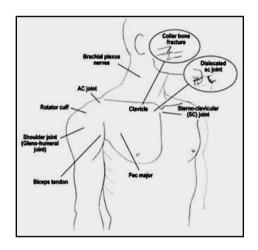
# THROWER'S SHOULDER:

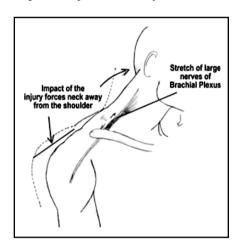
With repetitive overhead throwing the front of the shoulder can stretch and the back gets tighter. This can cause abnormal gliding of the shoulder joint and a 'catching' of the labrum and rotator cuff, leading to rotator cuff tears and abnormal wear of the labrum. It requires specific experience to diagnose and treat this condition.



# **RUGBY SHOULDER:**

We treat a large number of Professional Rugby players and have noticed specific patterns of injury as a result of the intense tackling associated with rugby these days. Mr. L Funk has presented his experience at national professional medical meetings. The injuries are similar to those of the Thrower's shoulder but not as predictable. Special tests are required to diagnose and treat these specific injuries correctly.

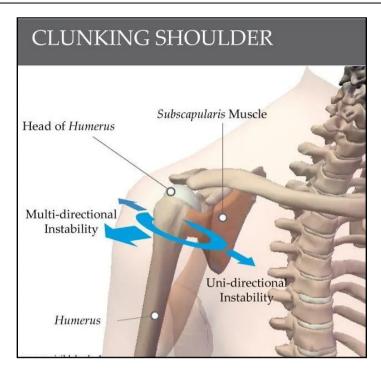




# **SWIMMERS SHOULDER:**

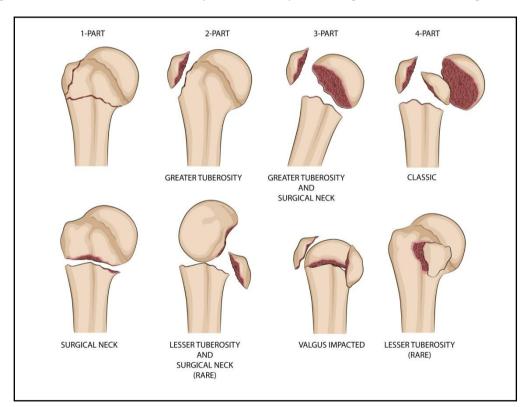
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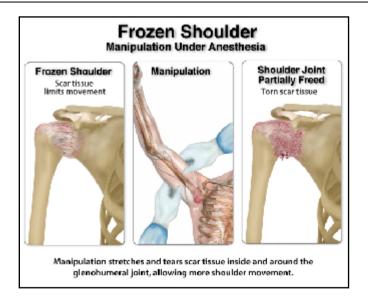
# **SHOULDER FRACTURES:**

Fractures around the shoulder have always been difficult to treat operatively, thus the results of shoulder fractures have not been as good as other fractures. With new fixation devices and safer surgical techniques, we can fix difficult fractures early and allow early return to sports better than in the past.



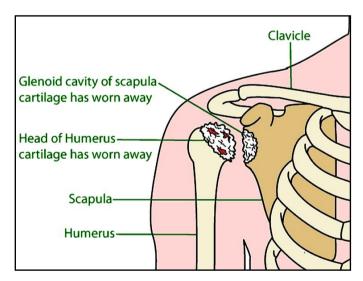
# FROZEN SHOULDER:

True frozen shoulder (a very stiff painful shoulder with no obvious cause) is very rare in athletes. However, a stiff painful shoulder following an injury (sometimes, quite minor) is not rare. In these cases, it is essential to treat the stiffness early and then also treat the underlying injury that caused the stiffness. The joint teamwork of an experienced physiotherapist and shoulder surgeon is very useful for an early recovery.



#### **SHOULDER ARTHRITIS:**

Arthritis is when a joint wears with age or overuse. The lubricant is reduced and the joint becomes stiff and painful. Keeping the shoulder active and the muscles toned is of benefit, along with painkillers. However, when the pain is severe enough to affect daily life and sleep a joint replacement is of benefit. Resurfacing shoulder replacement has several advantages over traditional shoulder replacements with large stems. The surface replacement for the shoulder with the best-published resultsis the Copeland Surface Replacement Arthroplasty (CSRA) The CSRA also lends itself to insertion by Minimally Invasive Surgical approaches, which we use at MSMC Hospital stay is reduced (usually 1-2 days) and early return to activities is expected. Patients should be able to move their shoulders the day after surgery.



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