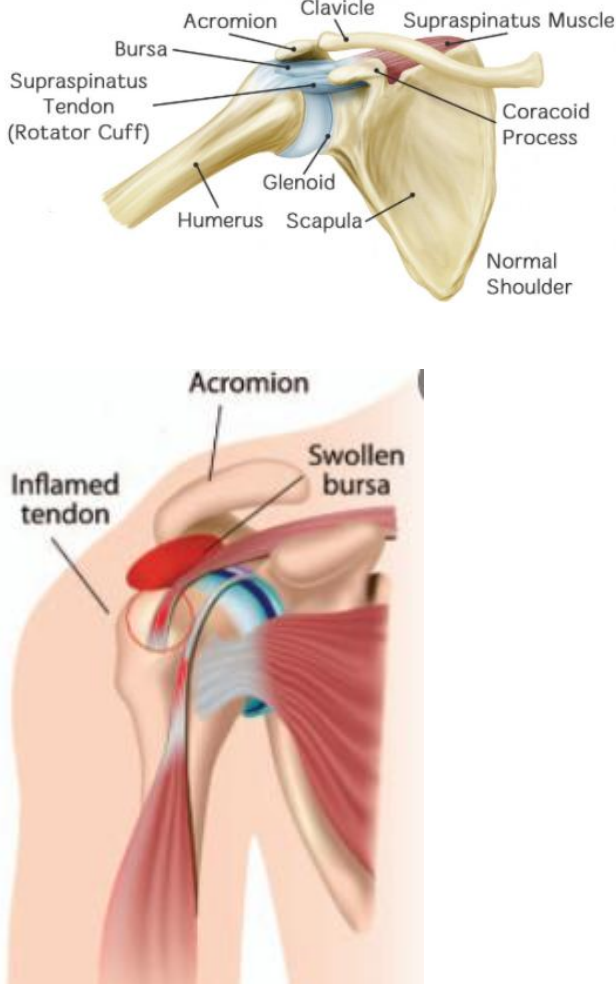


## SHOULDER SOFT TISSUE COMMON INJURIES AND DYSFUNCTION

Injury /condition	Description	Picture
<p><b>Sub-acromial pain syndrome (impingement)- “swimmer’s shoulder”, or “thrower’s shoulder”</b></p> <p>Two common examination signs can be elicited in cases of subacromial impingement: <b>Neers Impingement test</b> and <b>Hawkins test</b></p>	<p>The inflammation and irritation of the rotator cuff tendons as they pass through the subacromial space. It characterised by pain, weakness, and reduced range of motion within the shoulder. It is most common in active individuals or in manual professions, typically under 25 years. It is the most common pathology of the shoulder – about 60% of shoulder pain complaints.</p> <p><b>Causes:</b></p> <p>Intrinsic mechanism:</p> <ul style="list-style-type: none"> <li>• Muscular imbalances: weakness in the rotator cuff muscles resulting in the humerus shifting proximally towards the body</li> <li>• Pathologies of the rotator cuff tendons due to tension</li> <li>• Overuse of the shoulder joint: repetitive microtrauma can lead to soft tissue inflammation of the rotator cuff tendons and the subacromial bursa, results in friction between the tendons and the coracoacromial arch</li> <li>• Degenerative tendinopathy: changes of the acromion can lead to tearing of the rotator cuff and proximal shift of the humeral head.</li> </ul> <p><b>Extrinsic mechanisms:</b></p> <ul style="list-style-type: none"> <li>• Pathologies of the rotator cuff tendons due to external compression</li> <li>• Anatomical shape of the acromion</li> <li>• Muscular imbalance: Reduced function of the serratus anterior and trapezius, that normally allow the humerus to move past the acromion on overhead extension, may result in a reduction in the size of the subacromial space</li> <li>• Glenohumeral instability: Any abnormality of the glenohumeral joint or weakness in the rotator cuff muscles can lead to superior subluxation of the humerus, causing an increased contact between the acromion and subacromial tissues</li> </ul> <p><b>Symptoms:</b></p> <ul style="list-style-type: none"> <li>• Progressive pain in the anterior superior shoulder, increased by abduction and relieved by rest</li> <li>• Weakness</li> <li>• Stiffness secondary to the pain</li> </ul>	

**Treatment and recovery:**

- RICE with pain
- Painkillers
- Regular physiotherapy: postural stability, mobility stretching and strengthening exercises

**Supraspinatus tendinopathy**

It is mostly a result of an impingement of the supraspinatus tendon as it passes between the acromion and the humeral head. Supraspinatus tendon becomes degenerated mostly as a result of repetitive stresses and overloading during sports or occupational activities.

**Exacerbating factors:**

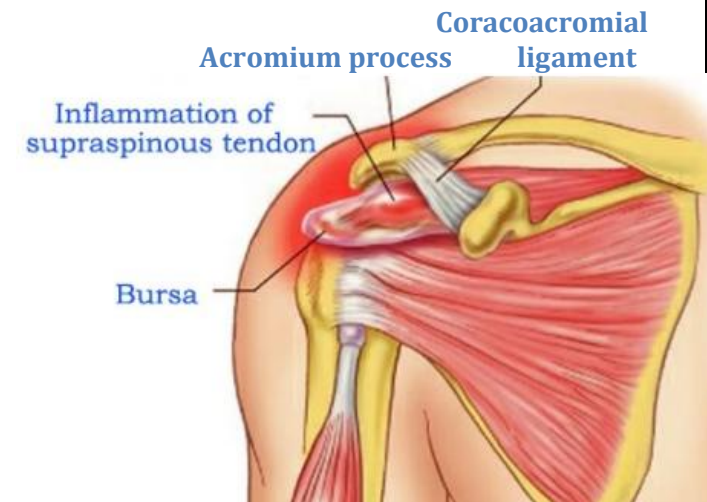
- Participating in overhead sports such as handball, volleyball, tennis, baseball, etc.
- Being over 50 years old
- Having Diabetes

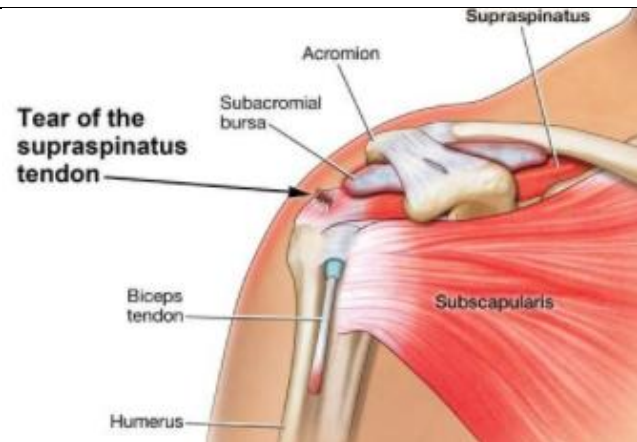
**Causes :**

- Overuse of the shoulder joint
- Muscular imbalance
- Degeneration
- Former shoulder trauma

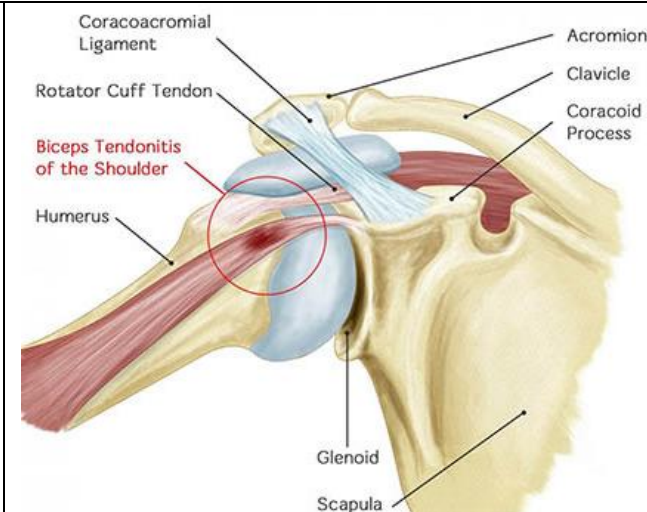
**Symptoms:**

- Anterior instability and posterior tightness of the shoulder muscles
- Pain:
  - In the arm and behind the shoulder while moving the arm upwards (waving at someone)
  - May radiate to the lateral upper arm or to the top and front of the shoulder
  - Increases with reaching
  - After frequent repetitive activity
  - Firstly only during activities, later- even at rest
  - Difficulty sleeping, especially when lying on the affected shoulder
- Progressive aching and it gets worse by abduction, elevation or sustained overhead activity
- Tenderness and burning sensation around the shoulder
- Weakness of resisted abduction and forward flexion, especially with pushing and overhead movements
- Limited ROM: difficulties with everyday movements, such as brushing hair, getting dressed, reaching the arm above shoulder height



	<p><b>Treatment and recovery:</b></p> <ul style="list-style-type: none"> <li>• RICE</li> <li>• Avoiding activities that may aggravate the condition</li> <li>• Painkillers/Anti-Inflammatory Medication</li> <li>• Physiotherapy: stretching and strengthening exercises</li> <li>• Takes up to 4 weeks</li> </ul>	
- Supraspinatus strain	<p>The supraspinatus tendon is the most vulnerable of rotator cuff muscles -90% of rotator cuff tears involve supraspinatus.</p> <p><b>Causes:</b></p> <ul style="list-style-type: none"> <li>• Overuse: lifting something too heavy</li> <li>• Direct trauma: falling on your arm or dislocating your shoulder.</li> <li>• Degenerative tear –prevail in people over 40years old</li> </ul> <p><b>Symptoms:</b></p> <ul style="list-style-type: none"> <li>• Pain at rest, at night</li> <li>• Deep pain around the shoulder, mostly over the mid-deltoid region</li> <li>• Pain with movement</li> <li>• Weakness in the shoulder muscles</li> <li>• Limited ROM of the joint</li> </ul> <p><b>Rotator cuff tears cannot heal themselves</b></p> <p><b>Treatment and recovery:</b></p> <ul style="list-style-type: none"> <li>• RICE</li> <li>• Painkillers/Anti-Inflammatory Medication</li> <li>• Physiotherapy</li> </ul>	
- Long head of biceps -tendinopathy	<p>Biceps tendinopathy/tendinitis is inflammation of the tendon around the long head of the biceps muscle.</p> <p><b>Causes:</b></p> <ul style="list-style-type: none"> <li>• Overuse : athletics requiring overhead motion</li> <li>• Degeneration</li> <li>• Commonly associated with rotator cuff tendon problems</li> </ul> <p><b>Symptoms:</b></p> <ul style="list-style-type: none"> <li>• Pain at the front of the shoulder</li> <li>• Swelling</li> <li>• Inflammation</li> <li>• Clicking or snapping with movement</li> </ul> <p><b>Treatment and recovery:</b></p> <ul style="list-style-type: none"> <li>• RICE</li> </ul>	

- Painkillers/Anti-Inflammatory Medication
- Physiotherapy
- **Can** heal well in 6 weeks or up to few months and doesn't cause any long-term problems



#### Clavicle fracture- Supraspinatus strain

Clavicle fracture is mostly a result of indirect or direct trauma to the shoulder region:

- Falling directly on the shoulder or on an outstretched arm (during play or sports)
- A result of a direct blow to the clavicle during sport activities (tackling in football, being crosschecked during hockey, etc)
- Accidents (car crash, etc)

#### **Signs and symptoms:**

##### **Sharp pain felt at the time of injury**

Pain that increases with shoulder movement

Stiffness or inability to move your shoulder

Swelling, tenderness, bruising along the clavicle

A bulge of the skin above the break

Grinding or crackling sound with attempt to move the shoulder

The affected shoulder sags, forward or downwards

#### **First AID for fractures !**

Clavicle fracture can lead to supraspinatus strain, tear or rupture.

