

Anatomy

The shoulder is a ball-and-socket joint that allows for a large range of movement but not a lot of stability. The socket is quite shallow which makes the shoulder more susceptible to dislocation. It is particularly unstable when it is rotated outwards and the arm cocked back or 'abducted'. Any additional force in this position will cause the head of the humerus (arm) bone to come out of the joint in a forward direction. This is referred to as an anterior dislocation and represents 95% of all shoulder dislocations.

Acute, traumatic posterior dislocation is far less common than anterior dislocation. This occurs either as a result of direct trauma to the front of the shoulder or from a fall on the outstretched arm that is internal rotation or abduction.

To give the shoulder stability there is a fibrous capsule that encloses the shoulder joint, and this is strengthened by ligaments that provide a reinforced thickening of the capsule. The joint also has a 'labrum', which is a fibrocartilage lip that increases the congruency of the joint and an intricate pulling action of the rotator cuff to create a suction force and assist controlled movement. Any of the above structures can be stretched or torn when the shoulder dislocates. It is also possible to fracture the humeral "head" (Bankart lesion) or the glenoid fossa "socket" when the dislocation occurs.

Description

A dislocation most often happens from either direct trauma to the humeral head (fall or tumble), or indirect trauma, usually with the arm being forced into excessive abduction and external rotation. In some individuals, dislocations can occur easily with normal shoulder movements. These individuals may have an increased level of flexibility or hypermobility generally in many joints - not just the shoulder.

Signs and Symptoms

- Feeling of the shoulder 'popping out'
- Immediate onset of pain usually following acute trauma
- Unable to move the shoulder
- Normal rounded appearance of the shoulder is replaced by a more squared-off edge as the arm (humerus) drops downwards



Treatment

The immediate medical management is often determined by the shoulder either relocating itself or being stuck in a dislocated state. A dislocated shoulder should be treated by an ambulance and/or doctor at your nearest hospital or medical centre immediately. Careful reduction of the shoulder should only be performed by qualified medical staff. Ideally, the dislocated shoulder should be X-Rayed prior to reduction as a fracture may be present. In most cases however, this is not practical and the shoulder may be reduced as soon as possible with a post-reduction X-Ray taken.

In any case, once reduced, treatment involves:

- Rest and immobilisation (usually a sling)
- Ice is beneficial in relieving pain and swelling
- Anti-inflammatory medication
- Physiotherapy

Physiotherapy treatment will assist in the most rapid and complete recovery and may include:

- Immobilisation
- Soft tissue massage
- Range of movement activities
- Intensive strengthening program – particularly the rotator cuff
- Functional rehabilitation
- Biomechanical analysis

Recurrent dislocations can be a problem as once the structures surrounding the shoulder are damaged, the shoulder is less stable. This inherent reduction in stability increases the chance of recurrent dislocation. For this reason, it is very important to complete your rehabilitation properly to help minimise this risk in the future.

Throwing and overhead activities necessitate a strong stable shoulder which can withstand high velocity forces. Restoring strength and flexibility is vital as recurrent dislocations require surgical intervention if appropriate physiotherapy has failed to stabilise the shoulder.

Please feel free to discuss any problems or queries with your physiotherapist or get up to date treatment options and protocols by subscribing online at www.rehabonthenet.com.