

LEARNING: SHOULDER INSTABILITY

The shoulder is one of the most commonly dislocated joints. Shoulder instability means the shoulder can dislocate or sublux during movement – it can happen for a variety of reasons and will determine the type of treatment received.

Shoulder instability is divided into three main categories, largely dependent on the first episode of dislocation/ subluxation:

Traumatic Dislocation

This is where the shoulder undergoes an injury with enough force to pull the shoulder out of joint, e.g. a violent tackle in rugby or a fall onto an outstretched hand. It is much more common in young men under the age of 30. Usually the shoulder requires reducing in Accident and Emergency. Following a first time dislocation, the arm is usually immobilised for anything up to three weeks. Recurrent dislocations are usually mobilised as soon as symptoms allow.

When a shoulder is dislocated, sometimes the rim of cartilage labrum is pulled away from the glenoid. This often does not heal and therefore the shoulder can remain unstable. Once the shoulder has been damaged in this way, the shoulder can dislocate again fairly easily. This damage to the labrum is often called a 'Bankart lesion', named after the doctor who first described this injury. Sometimes, if enough force is present during a dislocation, a small part of bone from the shoulder socket (glenoid fossa) may break off with the labrum. This is often called a 'bony Bankart lesion'.

Shoulder stabilisation surgery is an operation to repair the damage to the labrum or the socket and therefore re-stabilise the shoulder joint. This type of repair may also be called a Bankart repair or a Latarjet procedure.

Atraumatic Dislocation

Repeated shoulder movements may gradually stretch out the joint capsule. This can happen with athletes such as throwers and swimmers. Following capsular stretching, the rotator cuff muscles can become weak, which can affect how the muscles around the shoulder interact with each other, leading to an imbalance of the shoulder.

Referral for specialist physiotherapy is the initial form of management in this type of instability, and treatment can be effective for as long as exercises are continued

Positional non-traumatic

This group of individuals can dislocate their shoulders without any form of trauma. Initially this may be voluntary i.e. a party trick, but eventually if repeated can then happen throughout everyday activities. It can affect both shoulders and can be associated with individuals who have generally lax joints. This type of instability is due to abnormal muscle patterning around the shoulder, which means the strong power muscles around the shoulder such as the pectoral muscles or latissimus dorsi are constantly switched on, pulling an already loose shoulder out of joint on active movement. The main treatment with this group is specialist physiotherapy, which looks at retraining movement patterns of the shoulder, to prevent further dislocations.

PRESENTATION AND EXAMINATION

- Pain
- Feelings of fatigue
- May have full or excessive range of motion
- Some increase temp but no redness
- History of dislocation or subluxation
- Apprehension with some movements
- Dead arm sensation
- Clunking/clicking/popping within the joint
- With dislocation, will have alteration in shoulder contour, marked muscle spasm and limited range of motion

OUTCOME MEASURE

The Oxford Instability Score can be a helpful tool when attempting to subjectively measure the severity and impact of a patient's shoulder instability on their daily life. It can also be helpful when deciding on possible interventions.

INVESTIGATIONS

X-ray may reveal the possibility of a bony Bankart lesion, however more often than not are normal. A CT arthrogram is the investigation of choice to demonstrate a Bankart lesion

TREATMENT

- Activity modification/relative rest
- Pain management
- Physiotherapy

Refer to specialist shoulder unit if fails to progress following initial dislocation or with recurrent instability

FURTHER READING AND RESOURCES

ARC - The management of shoulder disorders in primary care
http://www.arthritisresearchuk.org/files/6534_05032010154554.pdf

NHS CHOICES – Shoulder Instability
<http://www.nhs.uk/Conditions/shoulderpain/Pages/Introduction.aspx>

ARTHRITIS RESEARCH UK – Shoulder pain leaflet
<http://www.arthritisresearchuk.org/Files/2039-Shoulder-pain.pdf>

OUTCOME MEASURES – Oxford instability score
http://www.orthopaedicscore.com/scorepages/oxford_instability_score.html