

Anterior Shoulder Instability

In traumatic anterior shoulder instability, the injury mechanism is characteristically an abduction, external rotation force to the shoulder with dislocation or subluxation (partial transient dislocation) of the glenohumeral joint. The injury usually involves damage to the ligament attachment (labrum) and/or bone in the front bottom corner of the glenoid (socket). Other patterns of injury include tears of the ligaments where they attach to the humerus (HAGL – Humeral Avulsion of Glenohumeral Ligaments) and stretching of the capsule and ligaments. Less commonly a rotator cuff tear may occur. Commonly the back of the humeral head has an impaction area (Hill Sach's Lesion) when the shoulder has been dislocated and this may be minor or significant.

Symptoms

In teenagers and young adults, it is common for instability to be a recurring problem after the first injury. Shoulder dislocations are less common in middle age or the elderly, but when they do occur, recurrent instability is less common than pain and stiffness. Rotator cuff tears are more common in older patients.

Patients often lack trust in their shoulder and feel it is weak or are apprehensive that it may come out of joint especially with collision, throwing or activities overhead.

Investigations

- We always get an X-Ray to check for fractures
- Commonly we get an MRI Arthrogram to check for labral tears and rotator cuff injuries
- Sometimes we get a CT scan to evaluate bone injuries – especially glenoid (socket) bone fractures (Bony Bankart Lesions) and areas of bone loss.

Surgery

- General anaesthetic
- Usually 1 night in hospital
- Repair and reconstruct damaged structures either arthroscopically (keyhole surgery) or by open incision surgery.

Arthroscopic surgery: the anterior labrum/glenoid can be repaired (Bankart and Bony Bankart lesions repaired). As well as any other (e.g. posterior or superior) labral tears. Sometimes the Hill Sach's lesion of the Humeral Head is also treated with a technique called 'Remplissage' where capsule and tendon tissue are sewn into the Humeral Head defect.

Open anterior stabilisation: the shoulder is approached through an anterior incision, and Bankart and Bony Bankart lesions can be repaired. If there is significant capsular laxity, it can be well dealt with through an open repair by performing a capsular shift procedure as part of the repair.

If there are significant bone defects then Bristow–Latarjet procedures may be performed. This involves detaching a region of bone from the scapular (the coracoid process) with its attached tendon and screwing this to the front of the glenoid (socket), in the area of bone deficiency.

Post-Surgery

- Sling for 6 weeks
- Usually shower daily, initially in a temporarily sling, but wear main sling all other times including in bed
- Pendulum exercises 10 – 14 days post-op, still wear sling other times
- Wean off sling over 3 days and short physio 6 weeks post-op
- You will be advised on rehab – usually work on movement initially, then strengthening after around 12 weeks post-surgery

Results

- The goal is to be able to perform full activities without instability symptoms and to feel the shoulder is near normal
- There may be some minor aching or movement restriction
- Recurrent instability may occur in 10 – 15% of patients, usually after recurrent trauma and maybe after some years of good function

Risks

- Recurrent, usually post-traumatic instability: the risk is higher with young patients, risky activities, loose jointed patients and patients with bone defects
- General risks of surgery including nerve injury and infection – uncommon
- Some residual discomfort or stiffness – uncommonly significant
- The recurrent instability rate is a little higher, but the complication rate is a little lower in the arthroscopic Bankart repairs compared to the open Bristow-Latarjet repairs. There are other factors to consider when advising on a choice of procedure

Return to Work and Activities Guidelines

Often the initial return to work is part-time hours and modified duties, gradually building up.

- **Sedentary work with arm in sling:** 10 – 14 days
- **Light two-handed desk height duties and driving:** 6 – 7 weeks
 - **Medium lifting below eye level:** 3 months
 - **Heavy work:** may be 4 – 5 months (depending on progress)
- Minimum 6 months before at-risk activities, e.g.: rugby, touch rugby, collision or, contact sports, sports with high falling risk