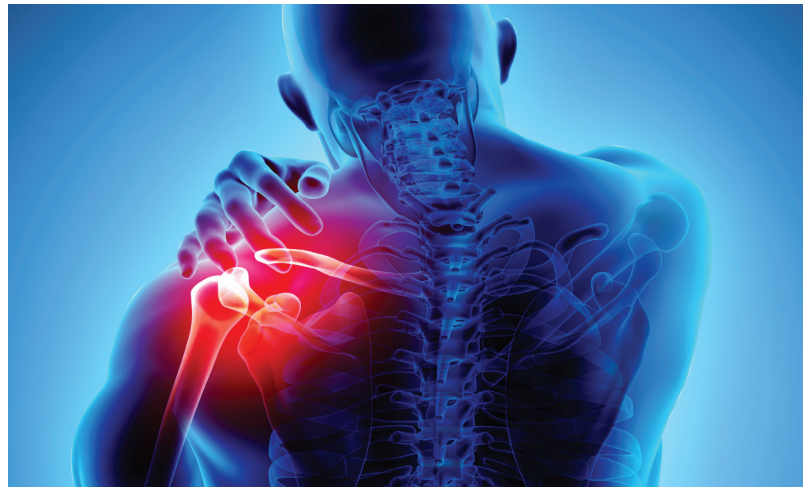




# Shoulder instability

A Fact Sheet by Dr Andrew McBride



## Dr Andrew McBride

BPhyt MBBS FRACS FAOrthoA  
**Orthopaedic Surgeon**

**Dr Andrew McBride**  
interests include:

### Shoulder

- Shoulder Arthroscopy / Rotator Cuff Repair
- Shoulder Fractures
- AC Joint Reconstruction

### Elbow

- Elbow Fractures
- Elbow Arthroscopy and Joint Replacement Surgery

### Sports Injury/Trauma

- Sports Injuries including Fracture and Dislocations
- Wrist acute and chronic injury

**To arrange an appointment with Dr Andrew McBride, please contact:**

Gold Coast Private Hospital  
Specialist Suites  
Ground Floor, 14 Hill Street,  
Southport QLD 4215

**P** 07 5530 0770

**F** 07 5530 0687

**E** [gcpsspecialistsuites@healthscope.com.au](mailto:gcpsspecialistsuites@healthscope.com.au)

### Gold Coast Private Hospital

14 Hill Street, Southport QLD 4215  
**P** 07 5530 0300 | **F** 07 5530 0646  
[goldcoastprivatehospital.com.au](http://goldcoastprivatehospital.com.au)

## What causes shoulder instability?

- The shoulder has the greatest range of motion of any joint in the body. It has limited bony constraints and relies on soft tissue constraints of the capsule, ligaments and musculature for stability. The labrum increases shoulder stability by increasing the glenoid cavity depth by 50%. The rotator cuff muscles provide dynamic compression of the humeral head through a phenomenon known as concavity compression and the biceps acts as a humeral head depressor.
- Shoulder instability can be atraumatic due to generalised ligamentous laxity or microtrauma from repetitive overhead sports. Posterior shoulder instability is a common cause of posterior shoulder pain, is often undiagnosed and is associated with repetitive overhead sports involving throwing (cricket, baseball) as well as tennis and volleyball.
- Most shoulder instability however is secondary to trauma and 95% of shoulder dislocations are in the anterior inferior direction. Acute shoulder dislocation has a bi-modal distribution most commonly affecting males under the age of 20 years followed by the 50 to 60 year old age groups.

## What do I look for on history and examination?

- A history of a posteriorly directed force on an abducted and externally rotated arm associated with contact sport or a fall on to an outstretched arm is the typical mechanism of injury for traumatic shoulder instability.
- Patients with atraumatic posterior shoulder instability typically report posterior shoulder pain and a drop off in performance or power with their throw or tennis serve.
- For traumatic anterior shoulder instability, patients are usually apprehensive when the arm is placed in abduction and external rotation and findings of weakness on rotator cuff testing are common.



## Dr Andrew McBride

BPhyt MBBS FRACS FAOrthoA  
**Orthopaedic Surgeon**

**Dr Andrew McBride**  
interests include:

### Shoulder

- Shoulder Arthroscopy / Rotator Cuff Repair
- Shoulder Fractures
- AC Joint Reconstruction

### Elbow

- Elbow Fractures
- Elbow Arthroscopy and Joint Replacement Surgery

### Sports Injury/Trauma

- Sports Injuries including Fracture and Dislocations
- Wrist acute and chronic injury

**To arrange an appointment with Dr Andrew McBride, please contact:**

Gold Coast Private Hospital  
Specialist Suites  
Ground Floor, 14 Hill Street,  
Southport QLD 4215

**P** 07 5530 0770

**F** 07 5530 0687

**E** [gpcspecialistsuites@healthscope.com.au](mailto:gpcspecialistsuites@healthscope.com.au)

### Gold Coast Private Hospital

14 Hill Street, Southport QLD 4215

**P** 07 5530 0300 | **F** 07 5530 0646

[goldcoastprivatehospital.com.au](http://goldcoastprivatehospital.com.au)

- Radiographs including an axillary lateral, west point and stryker notch view will help to identify associated bony lesions such as a “Hill Sachs lesion” (indent on the posterior aspect of the humeral head) or a bony “Bankart” lesion (fracture of the glenoid) however MRI scan is needed to reliably diagnose labral tears and associated rotator cuff tears.

## How should I manage my patient with shoulder instability?

The management of multi-directional instability and posterior shoulder instability should involve a period of intensive physiotherapy to retrain the scapular and rotator cuff musculature, moderate the volume of training and play, introduce sports specific rehabilitation and address any deficits in the serving or throwing technique for the sport.

The recurrence rate following the non-surgical management of traumatic anterior shoulder instability ranges from 33 to 67% and increases to 55 to 82% in young male patients. Non-surgical management may be considered for older sedentary patients and for athletes who sustain a dislocation during the playing season pending surgical stabilisation at the end of the season. This involves analgesia, sling immobilisation for comfort for a period of two weeks, early range of motion then progressive strengthening of the rotator cuff from six weeks post injury.

## Surgical management

Most patients who suffer a traumatic anterior shoulder dislocation have a structural lesion. 85% have a bankart lesion (detachment of the anterior labrum from the glenoid rim) and 40-90% have a hill sachs lesion (bony compression fracture of the posterior superior proximal humerus). Older patients are a high risk of an associated rotator cuff tear. Given the high rates of re-dislocation there is increasing acceptance of surgical treatment as first line care to reduce the risk of re-dislocation and further injury. Surgery should be considered in all patients at high risk for recurrence including young age, athletic activity, male sex and presence of a bony bankart lesion.

Arthroscopic shoulder stabilisation with suture anchors has been shown to reduce redislocation rates to around 7% with 90% of patients returning to their preinjury level of sports participation.

For patients with glenoid bone loss the most widely performed grafting technique is the Latarjet procedure where the coracoid is osteotomised at its base and transferred to the face of the glenoid. Excellent results are reported with very low (3-5%) redislocation rates.

## Rehabilitation and Recovery

Rehabilitation after the surgical management of anterior glenohumeral instability is an essential part of the treatment process and should be conducted under the supervision of an experienced physiotherapist. The goal of rehabilitation is to protect the soft tissues during healing and restore motion, strength and proprioception.

## Further reading (1-3)

1. Frank RM, Romeo AA, Provencher MT. *Posterior Glenohumeral Instability: Evidence-based Treatment.* J Am Acad Orthop Surg. 2017;25(9):610-23.
2. Streubel PN, Krych AJ, Simone JP, Dahm DL, Sperling JW, Steinmann SP, et al. *Anterior glenohumeral instability: a pathology-based surgical treatment strategy.* J Am Acad Orthop Surg. 2014;22(5):283-94.
3. Youm T, Takemoto R, Park BK. *Acute management of shoulder dislocations.* J Am Acad Orthop Surg. 2014;22(12):761-71.