

# Clinical coding guidelines: Shoulder arthroscopy

ICD-10-AM/ACHI/ACS Eleventh Edition

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# **Shoulder arthroscopy**

An arthroscope is a pen-shaped instrument with a very small video camera attached to the end. Lenses inside the arthroscope transmit an image that is projected onto a television screen. The image can be magnified as much as 30 times, giving the orthopedic surgeon an exceptionally clear view of the inside of a joint. From this view, the surgeon can then operate inside the joint using small instruments inserted through separate tiny incisions (portals) (Slowick 2012).

Arthroscopy is both a diagnostic and surgical procedure and is generally performed as a day case procedure under general anaesthesia.

# **Basic anatomy of the shoulder**

The shoulder is the most versatile joint in the human body. The shoulder's flexibility is due to its unique structure. The main joint of the shoulder is a "ball-and-socket" joint. A "ball" at the top of the humerus fits neatly into a "socket," called the glenoid, which is part of the scapula (Slowick 2012).

Three bones come together to form the shoulder. These bones are the clavicle, the scapula, and the humerus. The acromion, a part of the scapula, forms the top of the shoulder (Slowick 2012).

The shoulder is made up of four separate joints. The interrelated action of these four joints allows the complex and extremely wide range of movements of the shoulder (Slowick 2012).

- The ball-and-socket joint, or glenohumeral joint, is the main joint of the shoulder.
- The joint between the acromion (part of the scapula) and the clavicle, is called the AC
  joint, or acromio-clavicular joint. Arthritis of the shoulder most commonly affects this
  particular joint.
- The junction between the clavicle and sternum, in the front of the chest, is called the sterno-clavicular joint. This joint anchors the shoulder to the chest wall.
- The fourth joint of the shoulder is between the scapula and the back of five of the upper ribs, and is called the scapulo-thoracic joint. This joint provides added movement of the shoulder toward the front and back of the body (Slowick 2012).

The shallow socket of the shoulder is given some extra depth by a structure called the labrum, which is a thick band of cartilage that attaches to and surrounds the humeral head. The glenohumeral joint is reinforced and assisted in its movement by the rotator cuff, a combination of four tendons and associated muscles. The muscles arise on various parts of the scapula, and their tendons attach to the humerus. One of the tendons of the biceps muscle runs through the shoulder joint and further helps to stabilise the joint (Slowick 2012).

The term "rotator cuff" refers to the group of four tendons that attach four shoulder muscles to the bone of the humerus. These muscles are dynamic stabilisers and movers of the shoulder joint (Slowick 2012). They also adjust the position of the humeral head and scapula during shoulder movement. The four tendons that make up the rotator cuff are:

- subscapularis
- supraspinatus
- infraspinatus
- teres minor (Rotator cuff tear 2008).

Ordinarily, the rotator cuff moves freely in the space between the top of the upper arm and the upper part of the scapula (the acromion), which overhangs the rotator cuff. Between the rotator cuff and the bony arch of the acromion lie two fluid-filled sacs called bursae. They protect the rotator cuff and allow smooth movement of the tendons over the bone (Slowick 2012).

Diagram of shoulder: <a href="http://www.orthosports.com.au/content\_common/pg-acromioclavicularjointdegeneration.seo">http://www.orthosports.com.au/content\_common/pg-acromioclavicularjointdegeneration.seo</a>

## **Procedures**

# **Subacromial decompression**

Subacromial decompression is a relatively non-invasive procedure for the treatment of subacromial impingement syndrome (*Arthroscopic subacrominal decompression* 2011). The aim of the procedure is to increase the size of the subacromial area and reduce the pressure on the muscle. It involves cutting the ligament and shaving away the bone spur on the acromion bone (*Arthroscopic subacrominal decompression* 2012).

#### **ACHI Code:**

48951-00 [1400] Arthroscopic decompression of subacromial space

# Rotator cuff repair

Rotator cuff repair is a type of surgery to repair a torn tendon in the shoulder. This surgery is described as a mini-open repair because it is performed via a larger incision to allow the surgeon to visualise the rotator cuff rather than via the scope.

#### **ACHI Code:**

48960-00 [1405] Arthroscopic reconstruction of shoulder

## **Acromioplasty**

An acromioplasty is when the under surface of the acromion is shaved to remove a piece of bone that reduces ongoing irritation to the rotator cuff tendons.

## **ACHI Code:**

48951-00 [1400] Arthroscopic decompression of subacromial space

## **Biceps tenodesis**

Biceps tenodesis is a procedure that cuts the normal attachment of the biceps tendon on the labrum and reattaches the tendon to the bone of the humerus. It is usually performed for the treatment of biceps tendonitis and may be performed as an isolated procedure, but more often is part of a larger shoulder surgery such as a rotator cuff repair (Cluett 2012).

This procedure releases the pressure of the biceps attachment on the cartilage rim of the labrum (shoulder socket) and allows a portion of the biceps tendon to be surgically removed. Essentially this procedure is moving the attachment of the biceps tendon to a position that is out of the way of the shoulder joint (Cluett 2012).

## **ACHI Code:**

47963-01 [1572] Tenoplasty, not elsewhere classified

## Reconstruction of shoulder

The aim of a shoulder reconstruction is to stabilise the shoulder and prevent it from redislocating. A shoulder reconstruction is usually indicated for recurrent episodes of instability. Although a shoulder which frequently dislocates may be easily relocated, it can lead to permanent damage with each episode of instability (*Shoulder reconstruction* 2012).

#### **ACHI Code:**

48960-00 [1405] Arthroscopic reconstruction of shoulder

# Stabilisation of shoulder (Bankart repair)

Arthroscopic shoulder stabilisation is performed to prevent recurrent dislocation due to the labrum being overstretched or torn off the glenoid. As the labrum rarely heals correctly the incidence of re-dislocation is high. Shoulder stabilisation involves repairing the torn labrum back to the glenoid using keyhole techniques (Piper 2012).

#### **ACHI Code:**

48957-00 [1404] Arthroscopic stabilisation of shoulder

# Removal of loose body

#### **ACHI Code:**

48948-01 [1395] Arthroscopic removal of loose body of shoulder

## **Debridement of shoulder**

Debridement of the shoulder is performed to remove any inflamed or scarred tissue present in the shoulder joint caused by arthrosis, rheumatoid arthritis, over use or by other means to gain more space inside the joint for the bones and tissues to move (Alleyne 2000).

It can also include removing any portion of the bone that is causing pressure on the tendons. It is generally suited for people who have rotator cuff tears that cannot be formally repaired (Alleyne 2000).

Debridement generally accompanies other, more substantial procedures (Alleyne 2000).

#### **ACHI Code:**

48948-00 [1397] Arthroscopic debridement of shoulder

## **Chondroplasty of shoulder**

Chondroplasty is a term used for smoothing over the irregular and loose edges of cartilage. This provides smoother transition between the damaged and healthy cartilage resulting in better gliding surfaces (*Chondroplasty* 2012). The main aim of a chondroplasty is to stimulate the growth of cartilage by forming a new cartilage layer over the bony surface (Hand 2010).

#### **ACHI Code:**

48948-02 [1404] Arthroscopic chondroplasty of shoulder

# **Biopsy of shoulder**

A biopsy is the removal of a sample of tissue from the body for examination. The tissue is examined to determine a diagnosis so only small samples are required (*Biopsy* 2012).

## **ACHI Code:**

48945-01 [1396] Arthroscopic biopsy of shoulder

# Synovectomy of shoulder

Shoulder synovectomy is surgery to remove inflamed synovium (synovitis) that lines the joint. The patients best suited for this procedure are those that have demonstrated minimal bony destruction and an intact rotator cuff. The benefits of this procedure diminish in relation to the severity of articular involvement (*Shoulder synovectomy* 2011).

## **ACHI Code:**

48954-00 [1397] Arthroscopic synovectomy of shoulder

# **Australian Coding Standards**

- ACS 1353 Bankart lesion
- ACS 1354 SLAP lesion

# References

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