First time shoulder dislocation in a young adult

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A young man presents to his GP two days after dislocating his shoulder for the first time when playing sport. How should he be managed? This article discusses measures that are currently used to reduce the risk of recurrence.

Case presentation

A 20-year-old man presented to his GP two days after sustaining his first anterior shoulder dislocation in a football tackle. The dislocation had been reduced under sedation in the casualty department of the local hospital, and his arm was placed in a sling. He had not suffered a shoulder dislocation before.

On examination, the shoulder was tender and the range of motion was good but not full. The anterior apprehension sign was positive (that is, forced abduction and external rotation of the shoulder was painful). Power was normal, as was sensation in the distribution of the axillary nerve. Plain x-rays of the shoulder were normal, showing a reduced shoulder and no evidence of fracture. There was no reason to perform an ultrasound.

The patient's sling was removed immediately and arm exercises were commenced. He was advised to see an orthopaedic surgeon as soon as possible to consider early arthroscopic intervention.

Discussion

Shoulder dislocation can occur in all sports in which participants may fall onto the shoulder or arm. The traditional practice is to immobilise the shoulder in a sling for four weeks and then commence a course of physiotherapy, with surgery recommended if the shoulder dislocates again. Unfortunately, the dislocation recurrence rate in young adults is greater than 70% (especially in those who play a lot of sport); it decreases with increasing age.

The reason for the high recurrence rate is that the anterior labrum tears away from the glenoid and does not heal, and the capsule undergoes plastic deformation (Figure 1a). With subsequent forced abduction and external rotation, the shoulder then continues to dislocate because there is no tissue located anteriorly to stop the ball from slipping out of the socket.

Recent studies indicate that the high recurrence rate can be reduced substantially (to about 30%) by arthroscopy within a week of the first dislocation to evacuate the haematoma and promote labral healing; if needed, an arthroscopic labral repair can be performed (Figure 1b). The shoulder is immobilised in a sling for three weeks after the operation, and the patient then undergoes physiotherapy. Sport needs to be avoided for about four months.

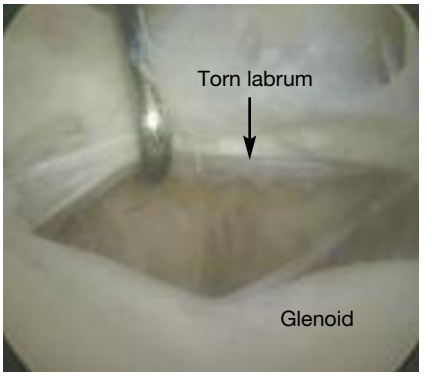

Figure 1a. Arthroscopic view of a torn labrum contributing to recurring anterior shoulder dislocation.

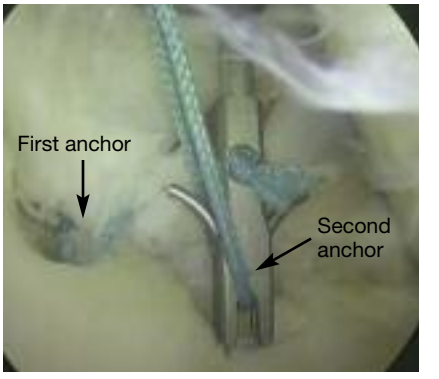

Figure 1b. Arthroscopic labral repair to reduce the risk of recurrence. Two anchors are being used to suture the labrum into the glenoid – the first anchor is in place and the second is being secured.

Key points

- Shoulder dislocation in young adults has a high rate of recurrence.
- A prompt arthroscopic procedure can reduce the risk of recurrence substantially. For maximal efficacy, the surgery is best performed within a week of the first dislocation. MT

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