

Slide 1

Ski Injuries

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Slide 2

Introduction

Falling over is standard

Shoulder injuries common, most are minor

Which ones should we look out for?





Slide 3

Who am I?


Shoulder surgeon St. George's & Cleveland
Clinic London

Particular interests ACJ injuries & instability




Slide 4

What happens on the mountain?



Slide 5

What happens on the mountain?



Slide 6

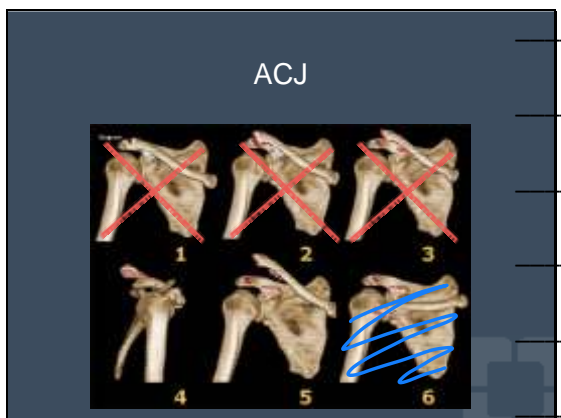
Format

- ACJ
- Dislocation
- Rotator Cuff
- SLAP tears

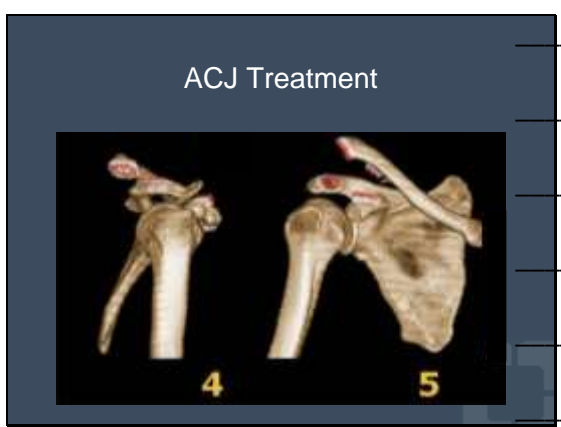
Slide 7



Slide 8

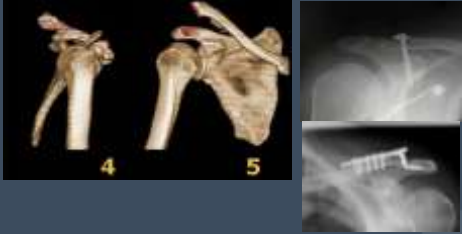


Slide 9



Slide 10

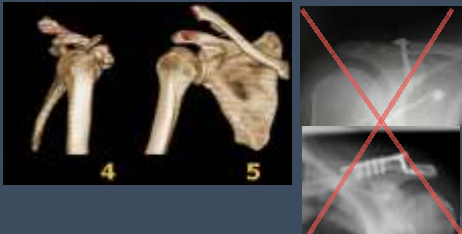
ACJ Treatment



The slide content includes two anatomical diagrams of the acromioclavicular joint, labeled 4 and 5, and two X-ray images. The top X-ray shows a normal ACJ, while the bottom X-ray shows a surgical repair with a coracoclavicular ligament reconstruction.

Slide 11

ACJ Treatment



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Slide 12

ACJ

4 fates

1. Appropriate conservative / operative Tm
2. Inappropriate conservative Tm (Missed Gd 4/5)
3. Inappropriate surgery (Gd 1/2/3 surgery)
4. Poor surgery


Slide 13

ACJ

Innapropriate conservative Tm (Missed Gd 4/5)

< 3 weeks - acute surgery




> 3 weeks- delayed surgery - no rush



Slide 14

ACJ

Acute surgery: ACJ Tightrope





ACJ Stabilisation video

Richards, A. Tennent, T.D FRCS
Arthroscopic Stabilization of Acute Acromioclavicular Joint
Dislocation Using the Tightrope System.
Techniques in Shoulder & Elbow Surgery, 9(2):51-54, June 2008.

Slide 15

ACJ

Delayed surgery: "Weaver - Dunn"



Modified Weaver-Dunn video

Slide 16


Dislocation

Mostly anterior

Mostly traumatic (check previous Hx)

Slide 17

Dislocation



Slide 18

Dislocation

Check

Diagnosis (often no x-rays)

Neurovascular status

1st time / recurrent

Rare to have acute mountain surgery

Slide 19

Dislocation

Management - 1st time

- <20yrs: >80% chance of recurrence
- >30yrs: <5% chance of recurrence
- >50yrs: greater risk of acute cuff tear



Slide 20

Dislocation

Management - 1st time

- <20: >80% chance of recurrence - ? surgery
- >30: <5% chance of recurrence - conservative
- >50: greater risk of acute cuff tear - scan if not progressing @ 6/52

Slide 21

Dislocation

Management - Recurrent dislocation

Refer on -not going to get better

Slide 22

Dislocation

- Other factors
- Contact sports
- Bone loss



Slide 23

Dislocation

The surgery




Anterior stabilisation video

Slide 24

Rotator cuff

- Contusion
- Greater tuberosity fracture
- Cuff tear



Slide 25

Rotator cuff

Observations

- Risk of tear rises with age
- GT impact fracture mostly missed on XR
- Check brachial plexus / axillary nerve esp in older patients

Slide 26

Rotator cuff

Clinical picture

- Early: all the same, lateral pain, elevation difficult, ? Weak
- 6 weeks: contusion/ tendinosis/GT # improving
- Small cuff tear: hard to distinguish
- Large cuff tear: pseudoparalytic

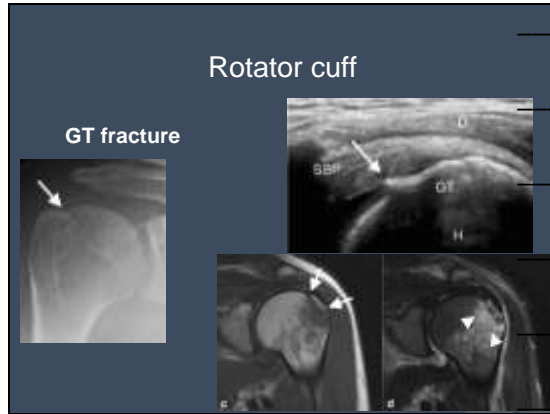
Slide 27

Rotator cuff

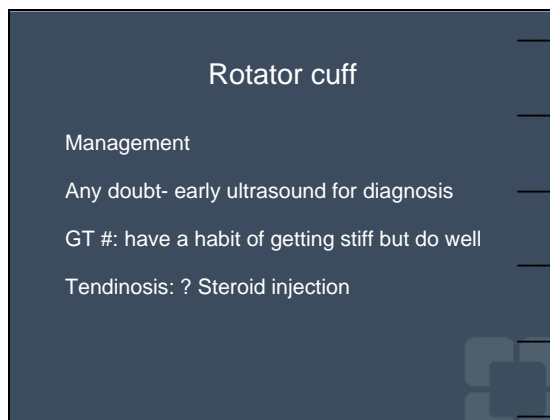
Contusion

- Tendinitis / bursitis
- Compression of cuff between GT & acromion

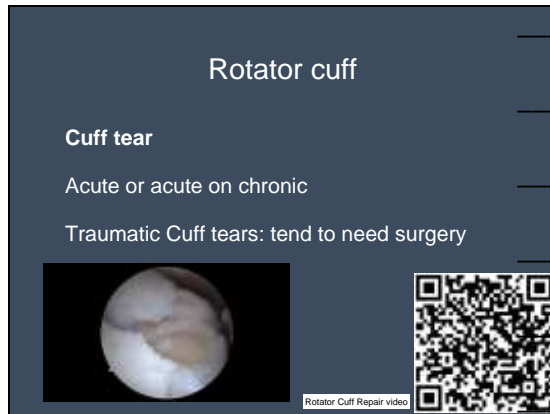
Slide 28



Slide 29



Slide 30



Slide 31

SLAP Tears

Superior Labrum Anterior Posterior

Attachment of LHB

Often diagnosed on MRI



Clinical testing unreliable

Slide 32

SLAP Tears

Injury to the superior labrum



Most attritional



Slide 33

SLAP Tears

Classification



Slide 34

SLAP Tears

Management

- Most not relevant
- Many asymptomatic
- Debride
- Repair
- Biceps tenodesis


Slide 35

SLAP Tears


Repair v Biceps tenodesis

More anatomic v quicker recovery

34yrs is the magic number



SLAP repair video



Arthrex biceps tenodesis video

Tennent, D. and Pearse, E., 2016. A percutaneous knotless technique for SLAP repair. *Arthroscopy Techniques*, 5(1), pp.633-635


Slide 36

Summary

Primary treatment may not be optimal - check the diagnosis

- ACJ: Only Gd 4 & 5 need surgery but window 3/52
- Instability: recurrent probably surgery
- Cuff: exclude cuff tear otherwise conservative
- SLAP: most dont need surgery


Slide 37




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