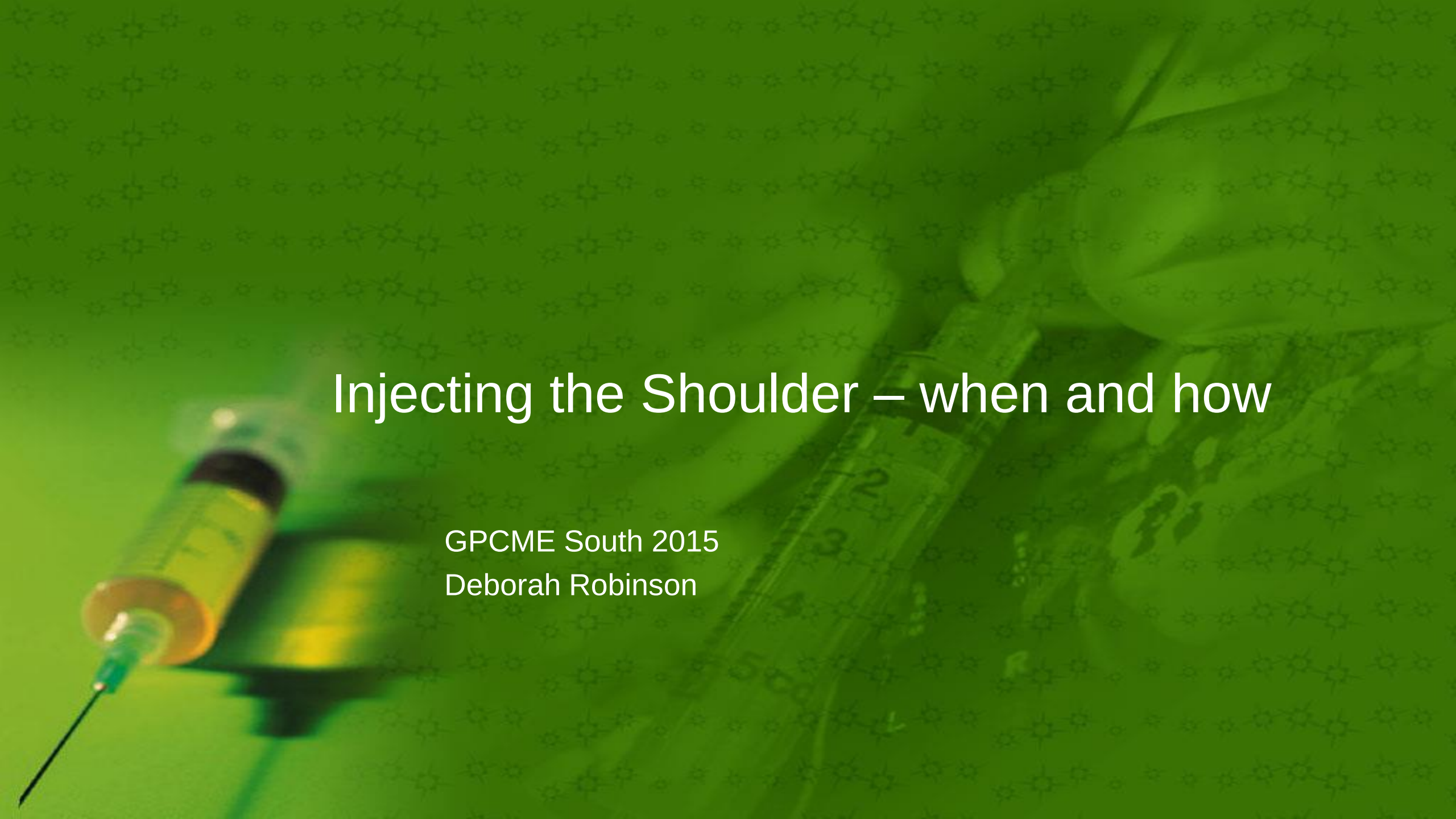


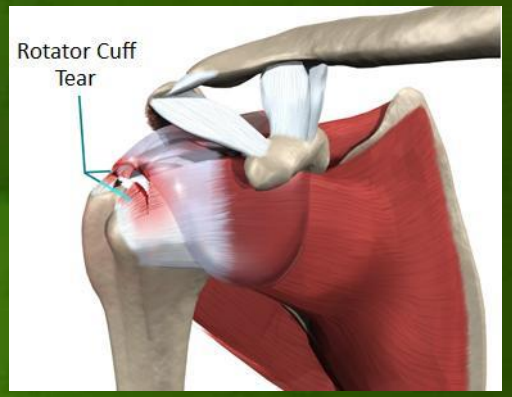
Injecting the Shoulder – when and how

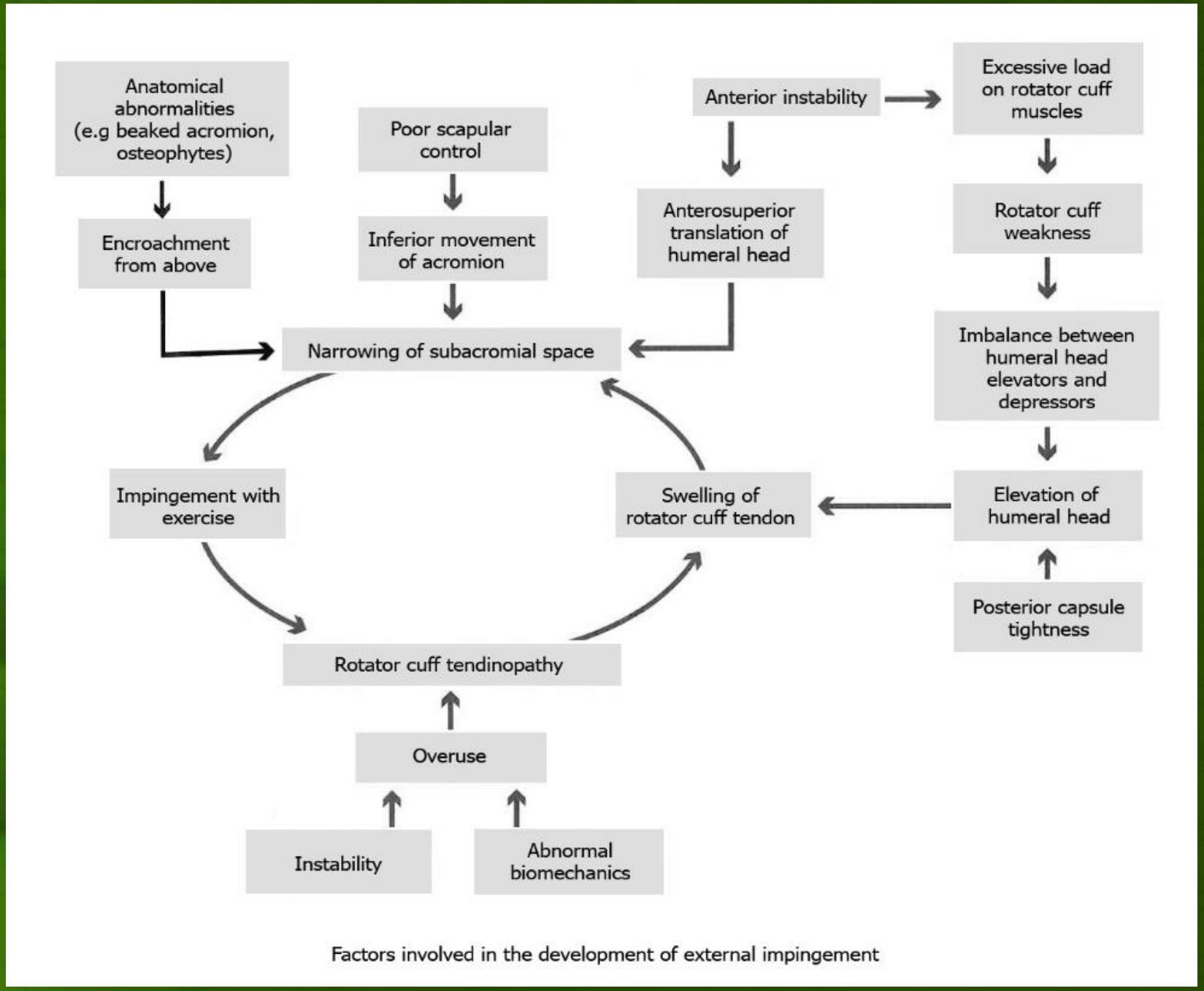
GPCME South 2015

Deborah Robinson

Indications – sub-acromial

- Impingement with pain
- Calcific tendinosis (fenestration)
- Acute sub-acromial bursitis
- Small rotator cuff tear
- To create a window to strengthen
- Elderly with large rotator cuff tear

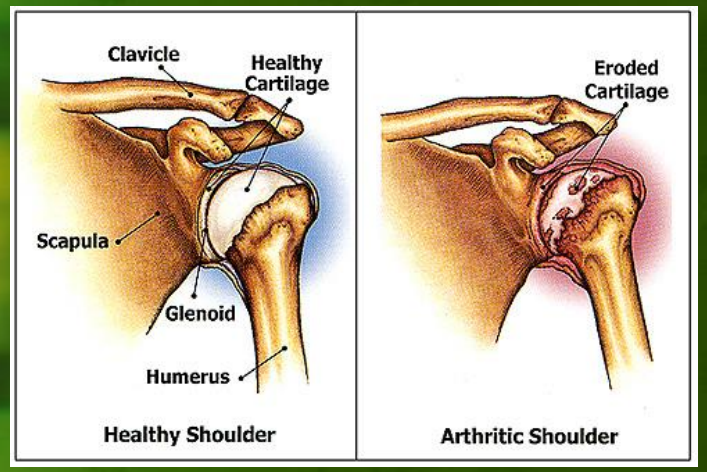


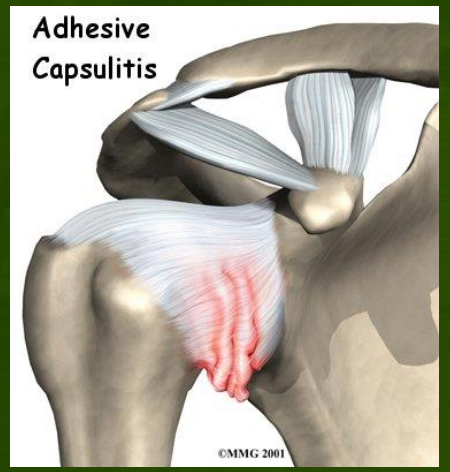


Factors involved in the development of external impingement

Indications – gleno-humeral injection

- Adhesive capsulitis
  - especially in early phase with pain++
- Osteoarthritis





Anatomical landmark v image guided

- sub-acromial space
  - the use of ultrasound to diagnose and deliver the injection in shoulder pain patients is superior to blind injections to increase pain relief and shoulder function
  - suggest that ultrasound-guided corticosteroid injections should be indicated in patients with poor response to previous blind injection in order to improve therapeutic effectiveness
  - Is it really mandatory to inject precisely into the sub-acromial bursa as opposed to the rotator cuff or the biceps tendon in a patient with shoulder pain to guarantee a reduction in pain and improvement in function over the longer term?

Other considerations

- Site of injection (superficial or deep)
- Patients body habitus
- Image guided adds significant cost (non-ACC $254 + $411 or ACC $63 + $140)

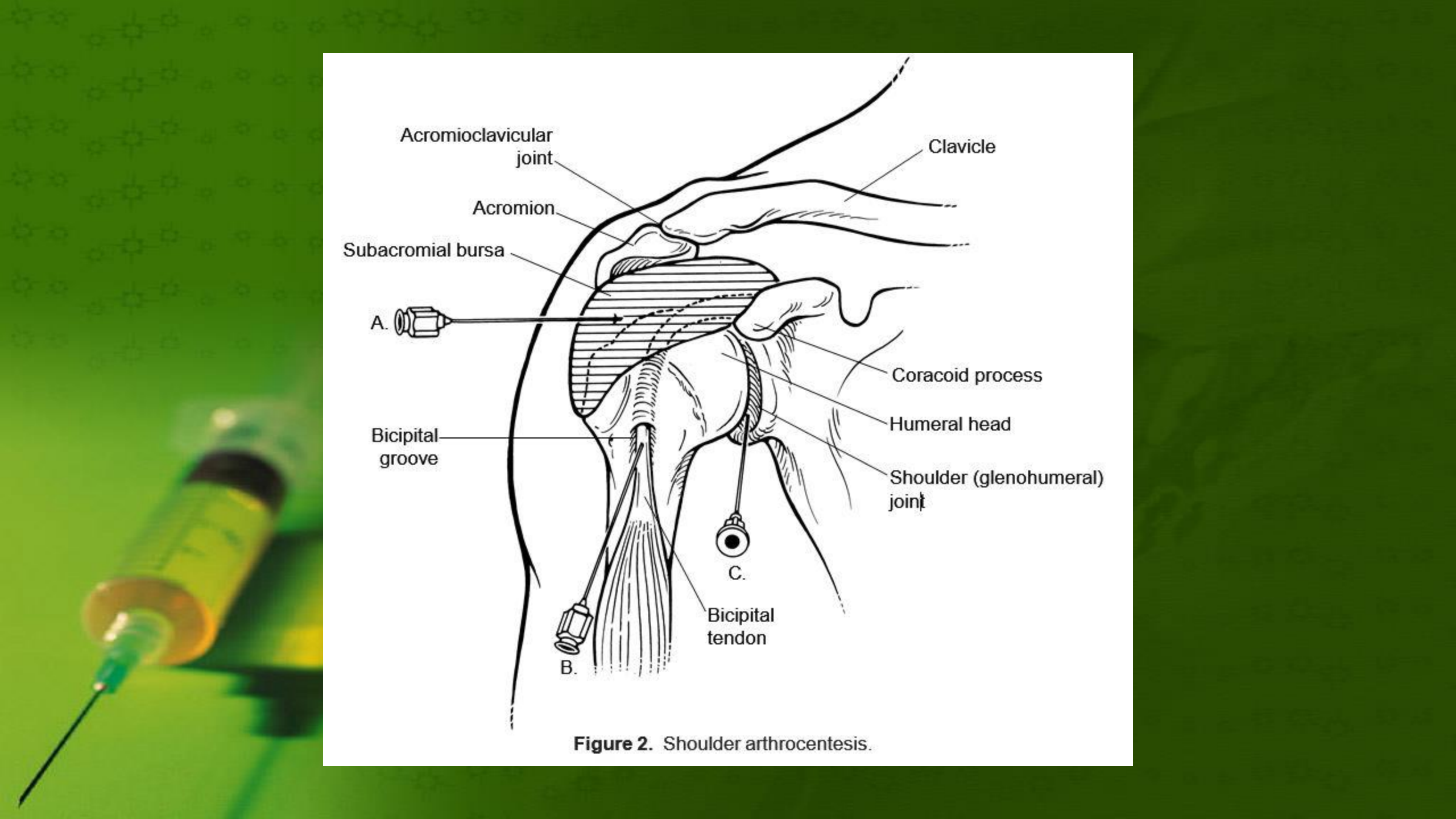
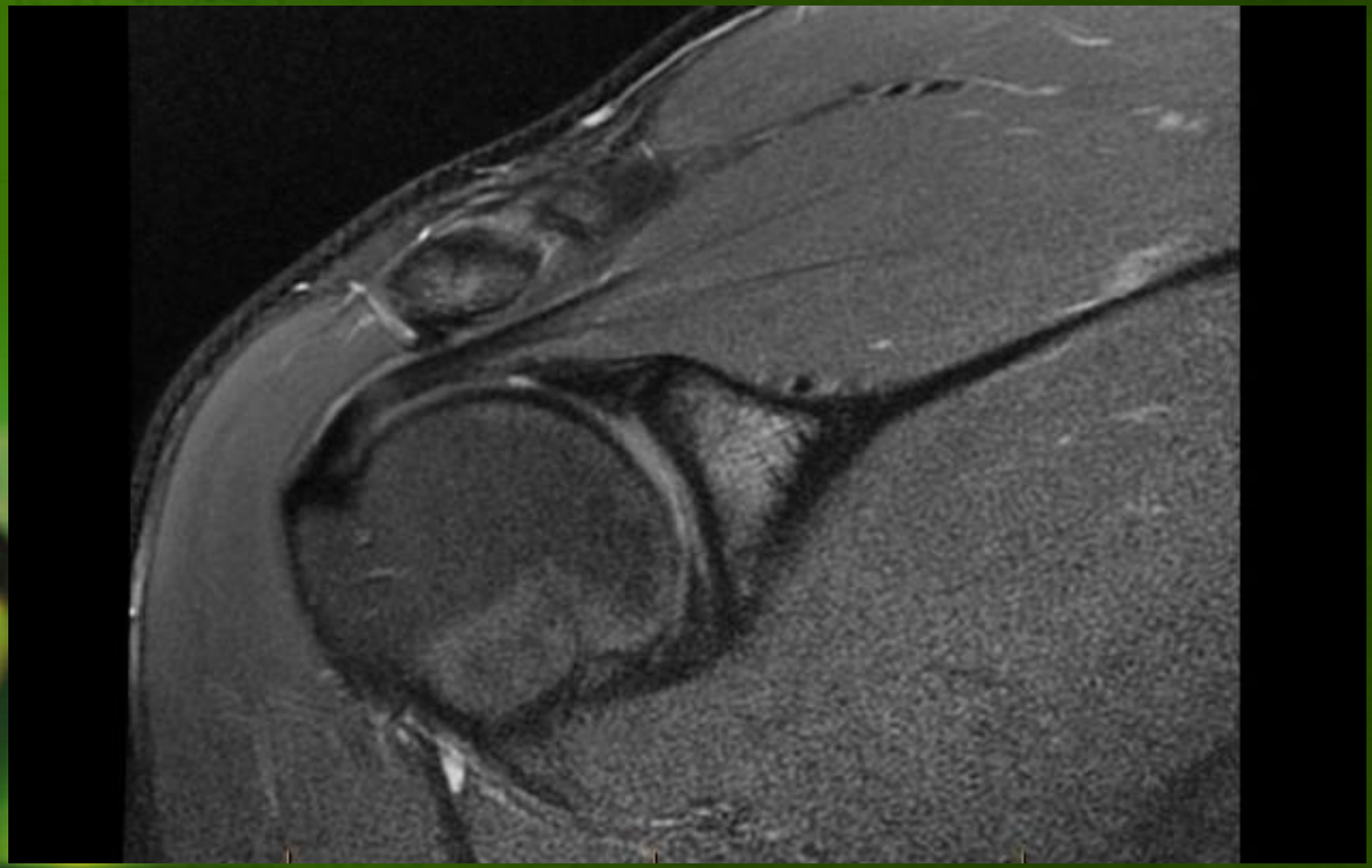
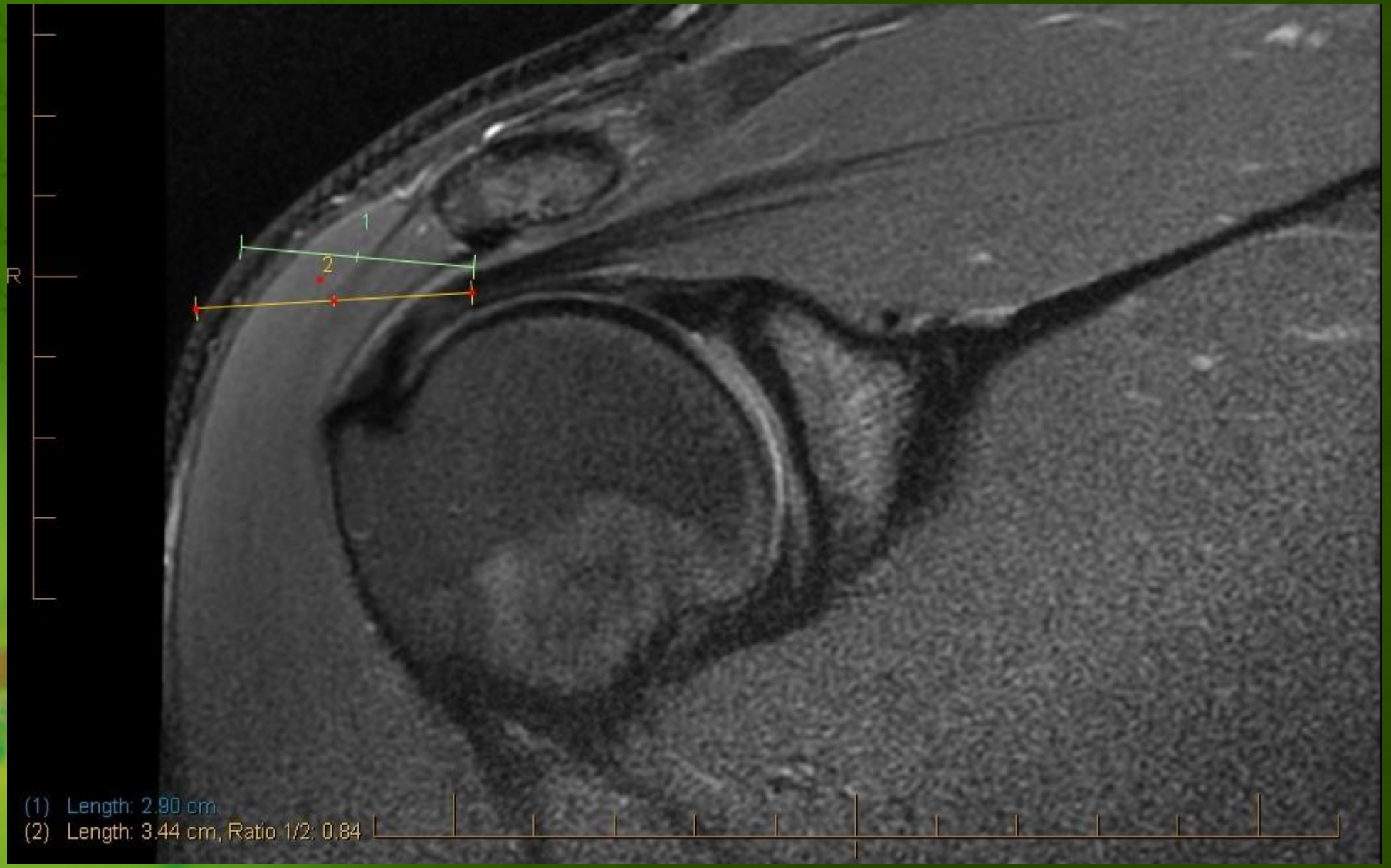
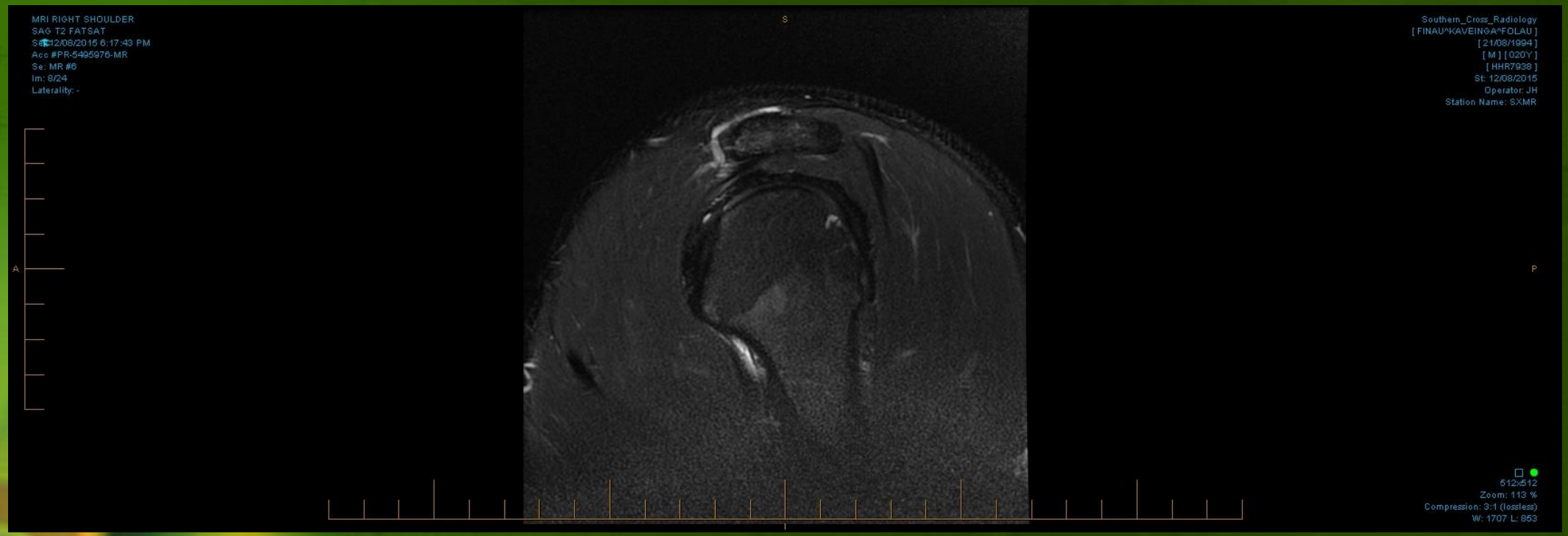


Figure 2. Shoulder arthrocentesis.

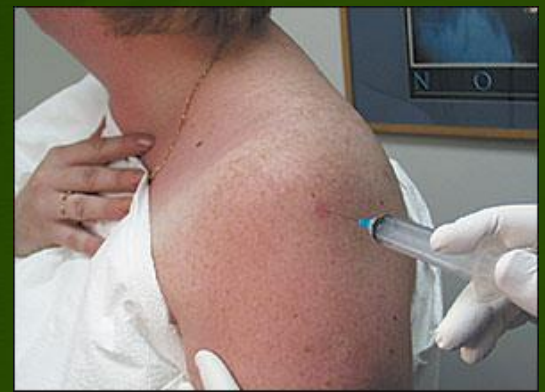



R
1
2
(1) Length: 2.90 cm
(2) Length: 3.44 cm, Ratio 1/2: 0.84


MRI RIGHT SHOULDER
SAG T2 FATSAT
Se: 12/08/2015 6:17:43 PM
Acc #PR-5495976-MR
Se: MR #6
Im: 8/24
Laterality: -
S
A
P
Southern_Cross_Radiology
[FINAU^KAVEINGA^FOLAU]
[21/08/1994]
[M] [020Y]
[HHR7938]
St: 12/08/2015
Operator: JH
Station Name: SXMR
512x512
Zoom: 113 %
Compression: 3:1 (lossless)
W: 1707 L: 853

Sub-acromial injection

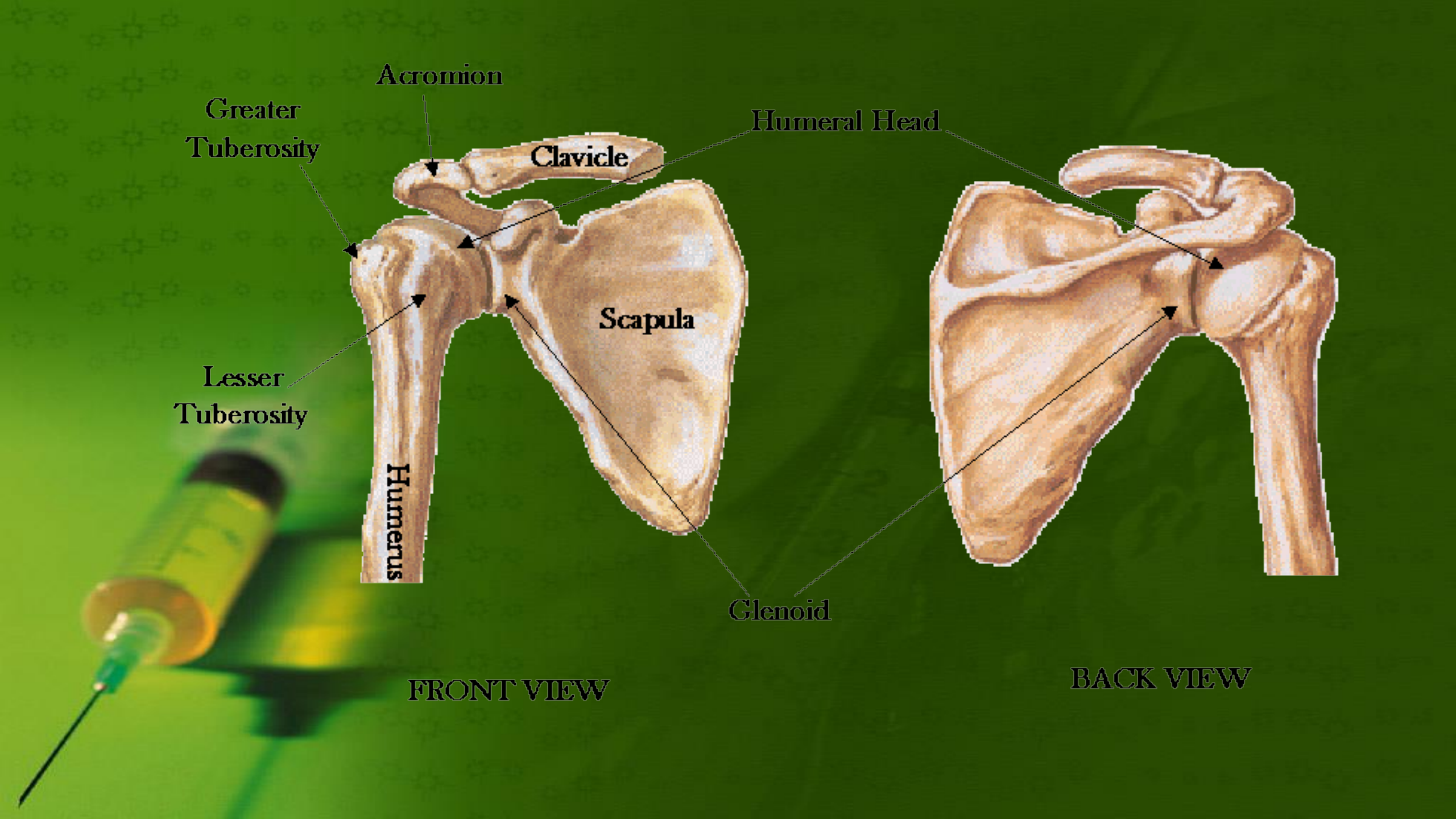
- Iodine/mediswabs with a no touch or aseptic technique
- 1% lignocaine for skin
- 22g 1 ½” needle (black)
- 2ml+ 1% lignocaine + 1ml Kenacort A40
- Patient sitting with arm hanging to allow gravity to open sub-acromial space
- Lateral border acromion, posterior 1/3, 1cm distal, aim slightly under acromion
- Fluid should flow easily

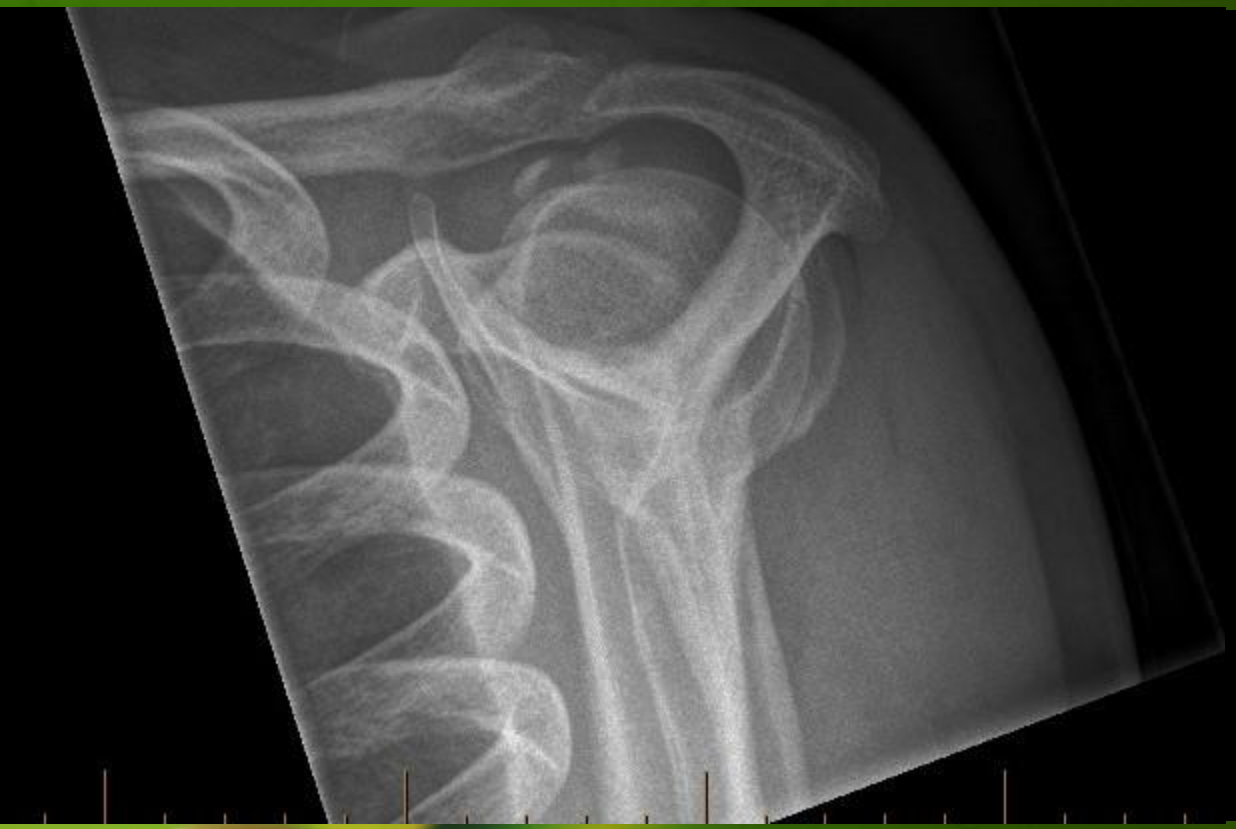


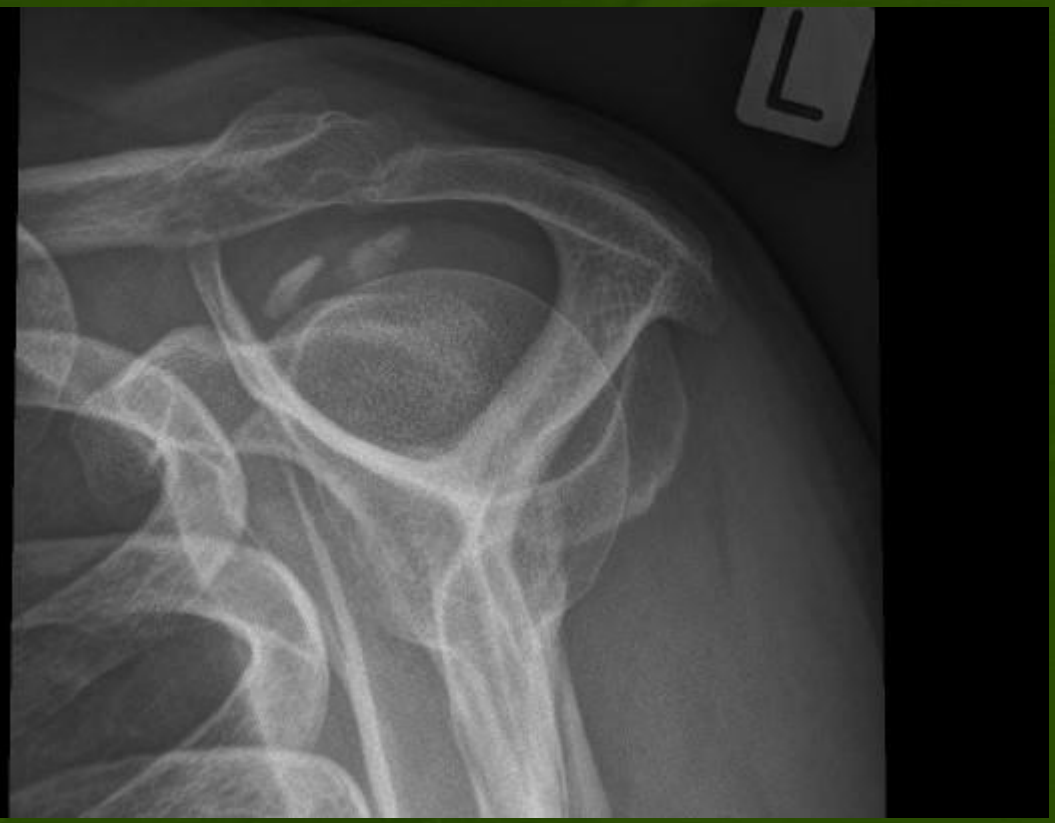
Gleno-humeral injection – posterior approach

- Patient sitting, hands in lap
- Postero-lateral corner acromion (2cm inferiorly and medial)
- Find sulcus between acromion and head of humerus
- Direct needle anteriorly toward coracoid process
- Insert full length of needle
- Fluid should flow easily

- 3-5ml 1% lig + 1ml K A40
- 22g 1 ½” needle
- Anaesthetic to skin prior


Acromion
Greater Tuberosity
Clavicle
Humeral Head
Scapula
Lesser Tuberosity
Humerus
Glenoid
FRONT VIEW
BACK VIEW




L