

Proximal biceps tendon lesions

M.N. Naderi

48 male with shoulder pain

- ▶ Heavy worker
- ▶ Pain from 8 month ago
- ▶ Physiotherapy for 30 session
- ▶ Corticosteroid injection one time

▶ Physical Exam :

- ▶ ROM
- ▶ Muscle force
- ▶ Special tests:
 - ▶ Laxity tests
 - ▶ Stability tests
 - ▶ Impingement test
 - ▶ Neer , Hawkins,
 - ▶ Biceps
 - ▶ O' brien, Speed , Yergeson

What next ?

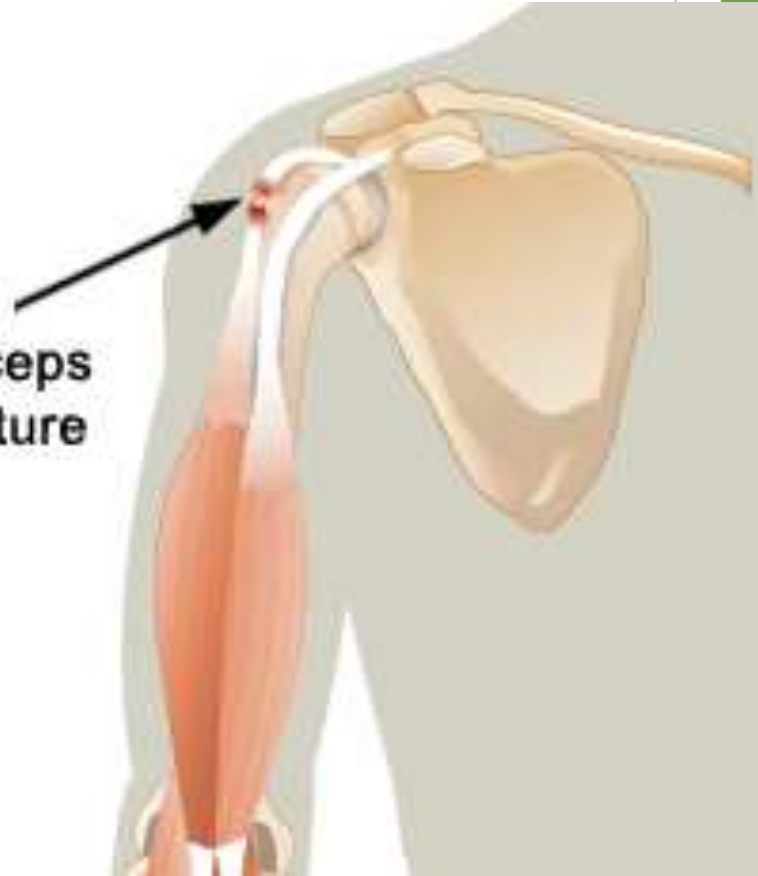
Arthroscopy findings:



Proximal biceps tendon

- ▶ Known source of shoulder pain
- ▶ Most proximal biceps pathologies in LH

Proximal Biceps
Tendon Rupture



Role of LHB in Shoulder

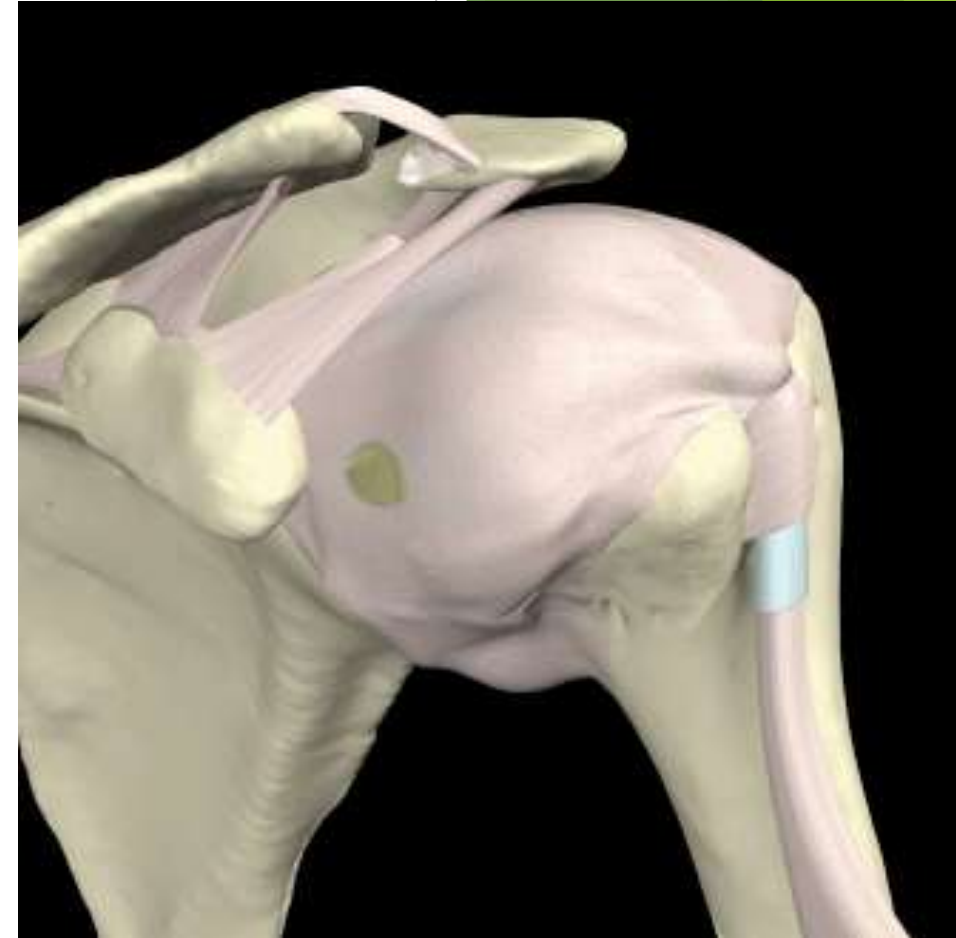
- ▶ **Flexor**
 - ▶ 7% of shoulder flexion
- ▶ **Depressor**
 - ▶ Weak with intact cuff
- ▶ **Stabiliser**
 - ▶ In absence of other stabilisers
 - ▶ Equal to short head of biceps
- ▶ **Throwing**
 - ▶ Active only with elbow flexion
 - ▶ Deceleration of the elbow [Andrews et al. Am J Sports Med.1985]



Copyright Primal Pictures

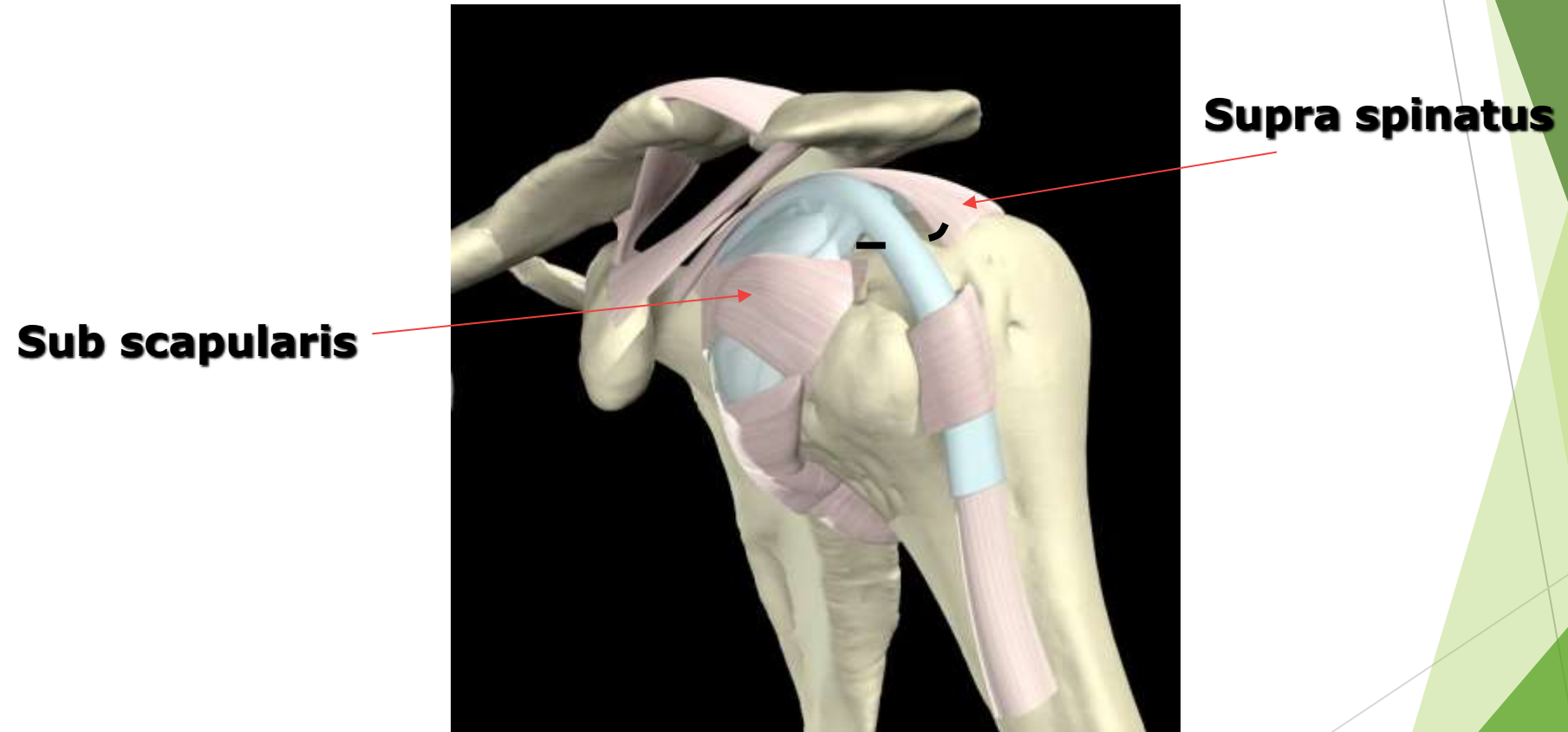
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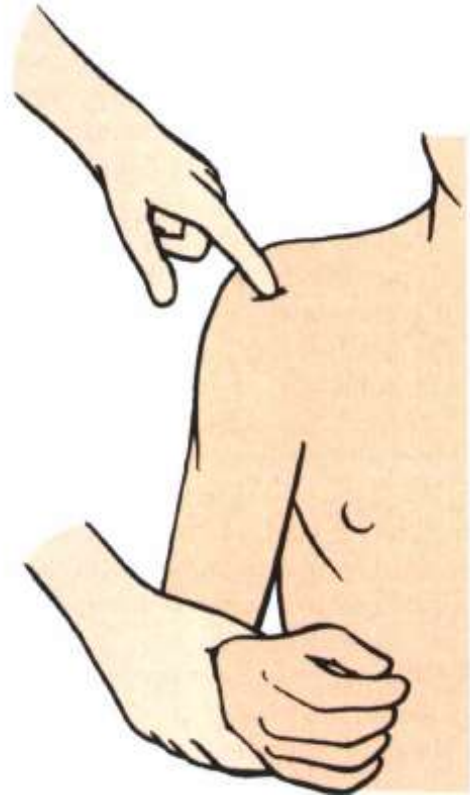
Biceps Pulley



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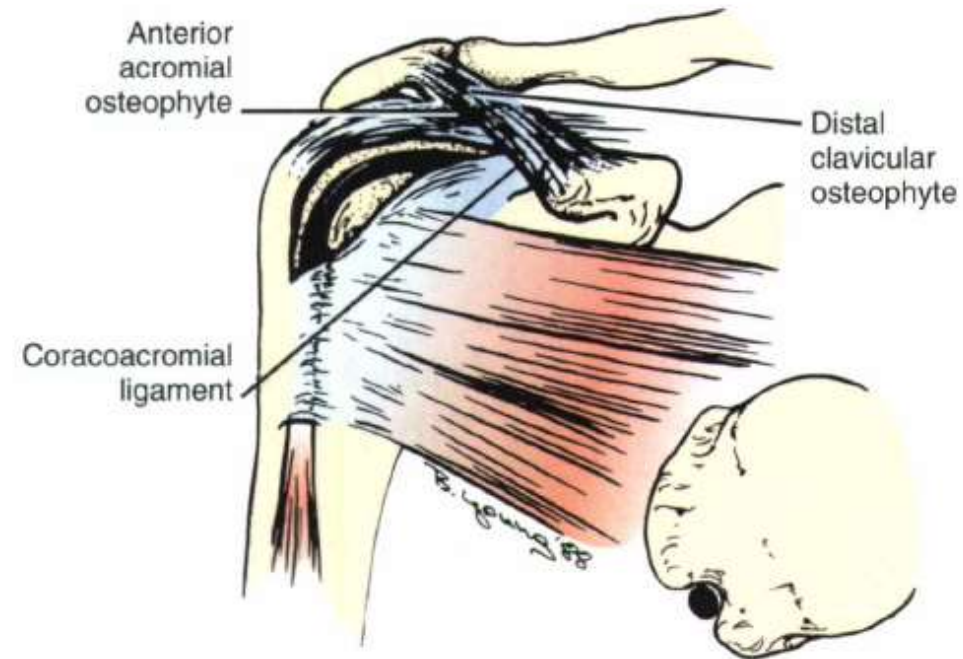
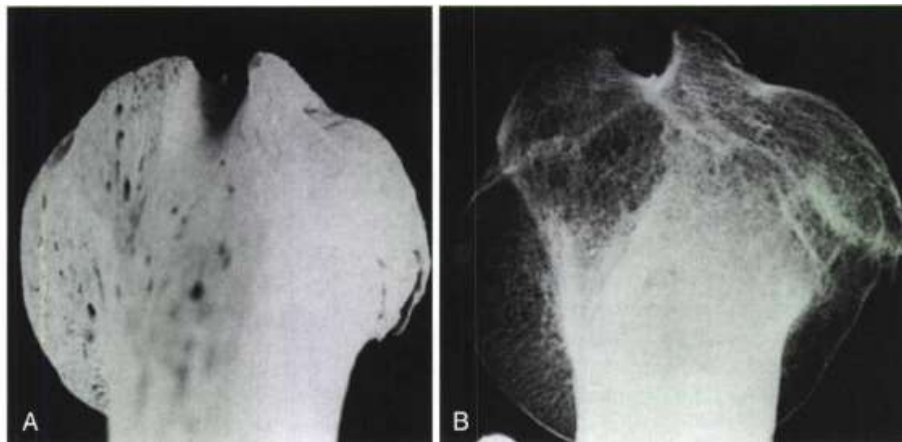
Pathologies of LH of Biceps

- ▶ **Tendinitis**
- ▶ **Instabilities**
- ▶ **Ruptures**



Biceps Tendonitis

- ▶ Common
- ▶ Co-existing cuff impingement/pathology
- ▶ Spurs and stenosis of biceps groove

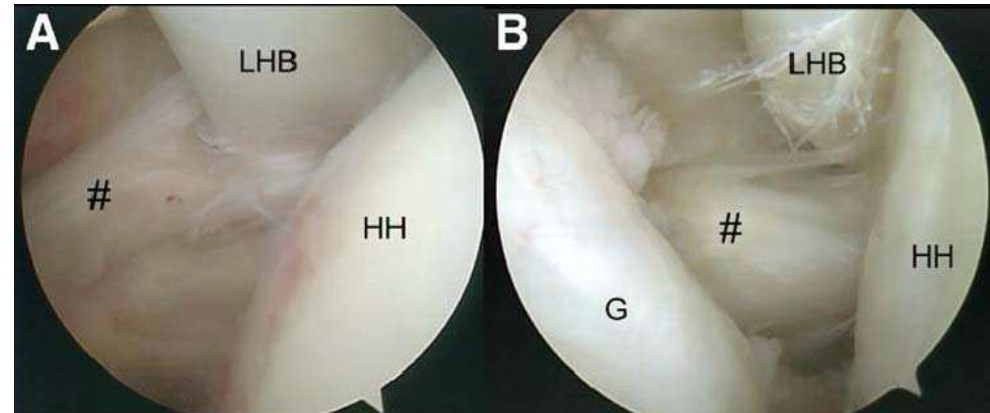
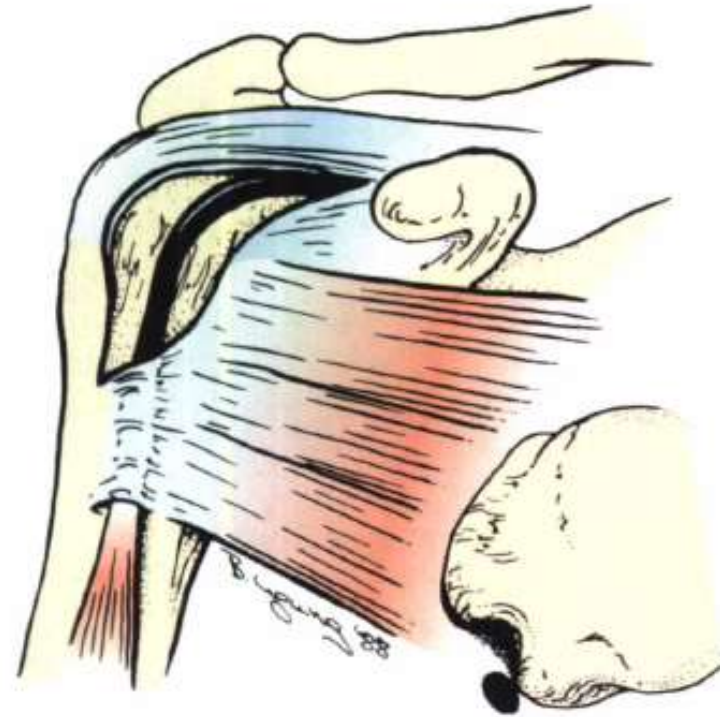


Biceps Instability

Subluxation or Dislocation

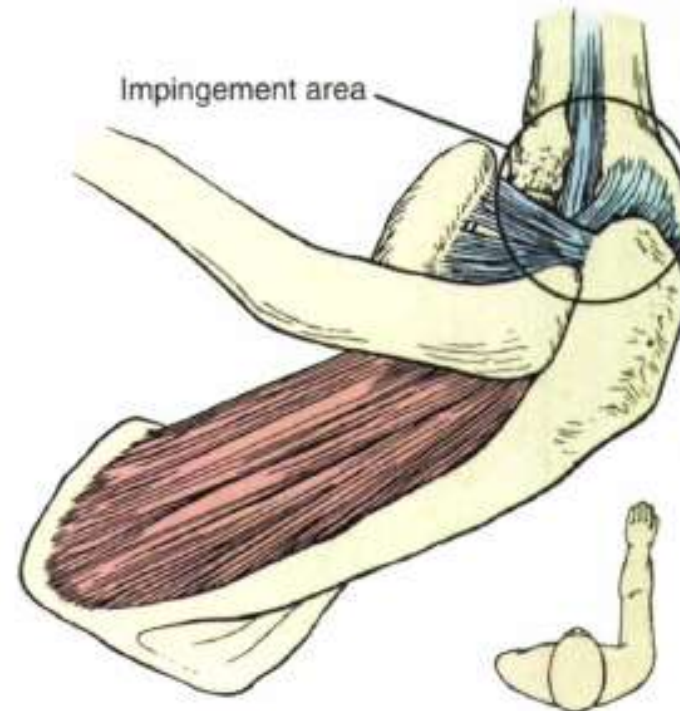
Causes:

- ▶ Pulley Rupture
- ▶ Cuff Tear (subscapularis)
- ▶ Fracture malunion or nonunion



Proximal biceps ruptures

- ▶ Trauma
- ▶ Pre-existing pathology



Diagnosis

► Physical exam

- Anterior shoulder pain
- Localised Tenderness
- Speed's Test - 80% sensitivity
- Yerguson's - 50% sensitivity
- AERS Test



Chronic tenderness

Time



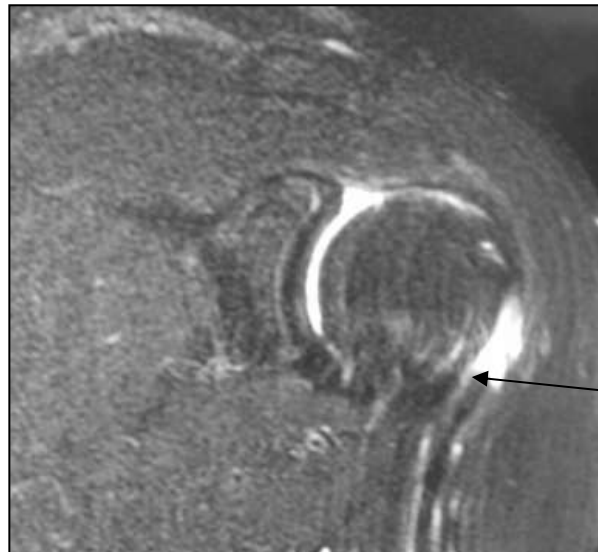
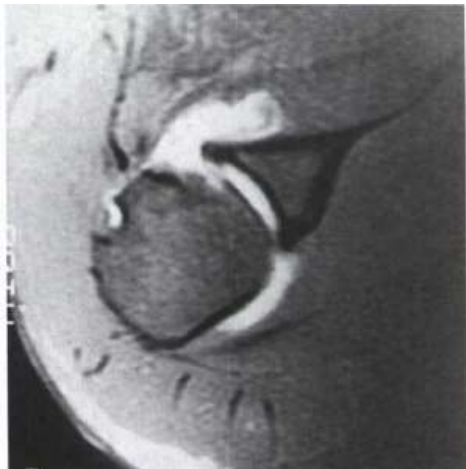
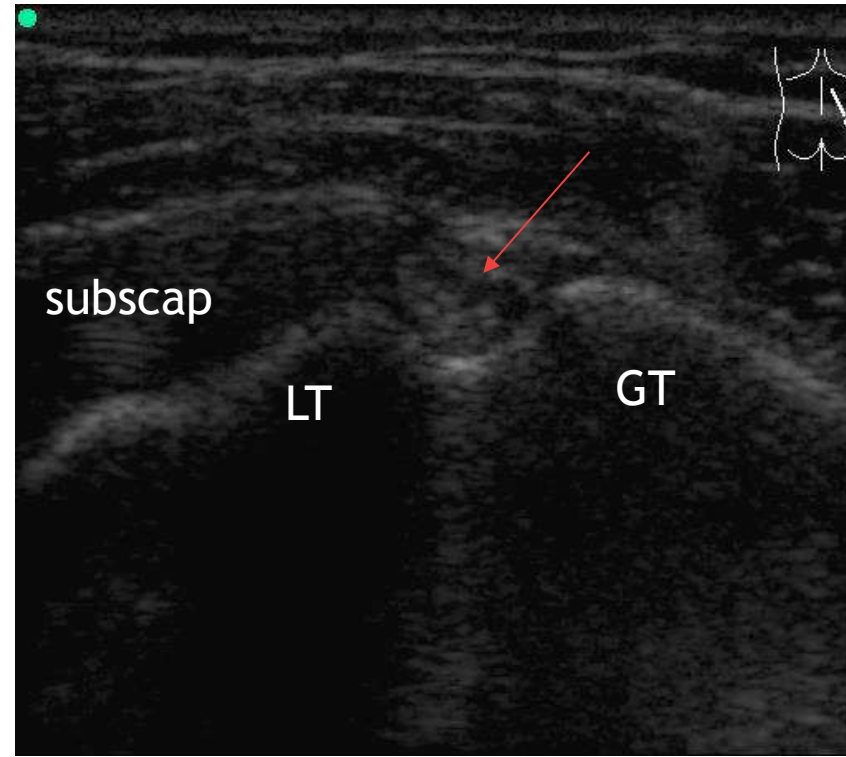
Sudden weakness



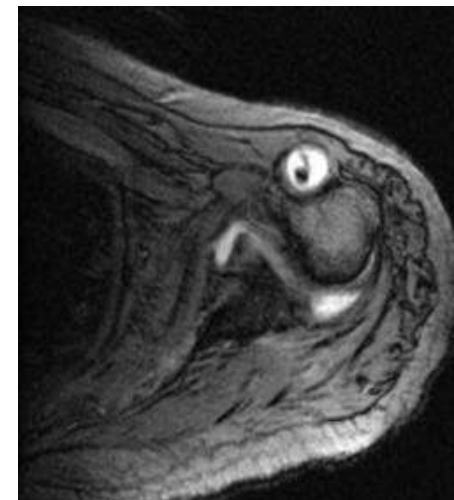
Popeye sign

Diagnosis

- ▶ Sonography
- ▶ MRI



LHB Rupture



Treatment

- ▶ Physiotherapy
- ▶ Injection
- ▶ Surgery
 - ▶ Debridement (<50% involvement)
 - ▶ Tenotomy
 - ▶ Tenodesis

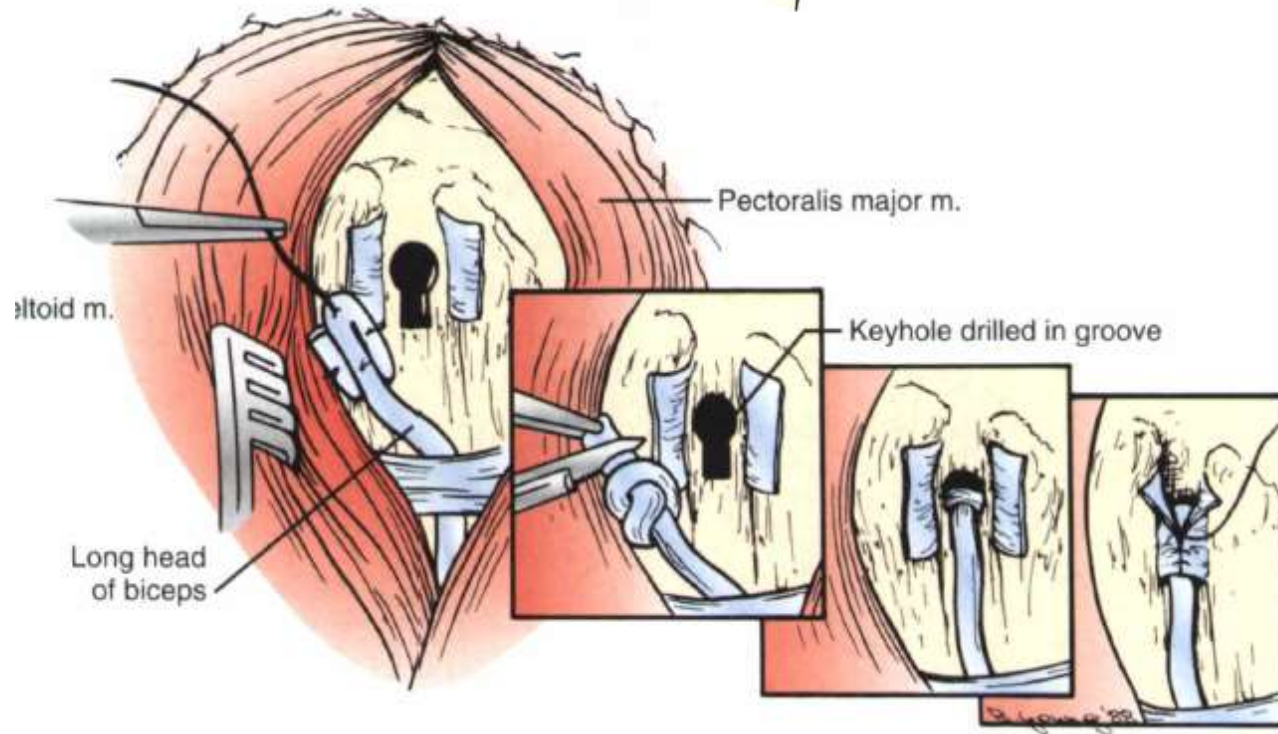
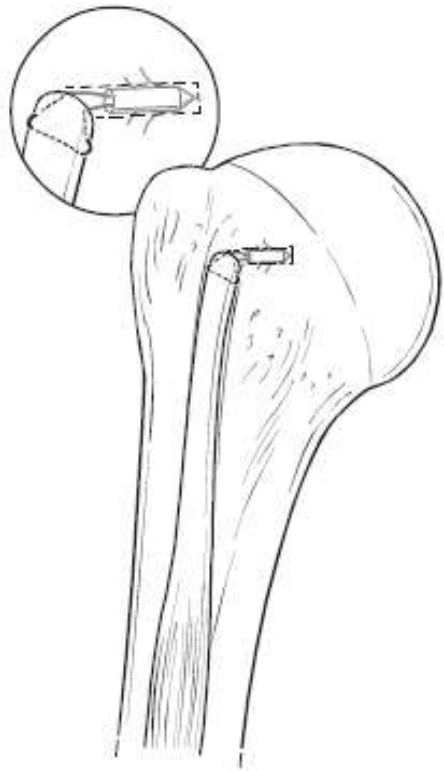
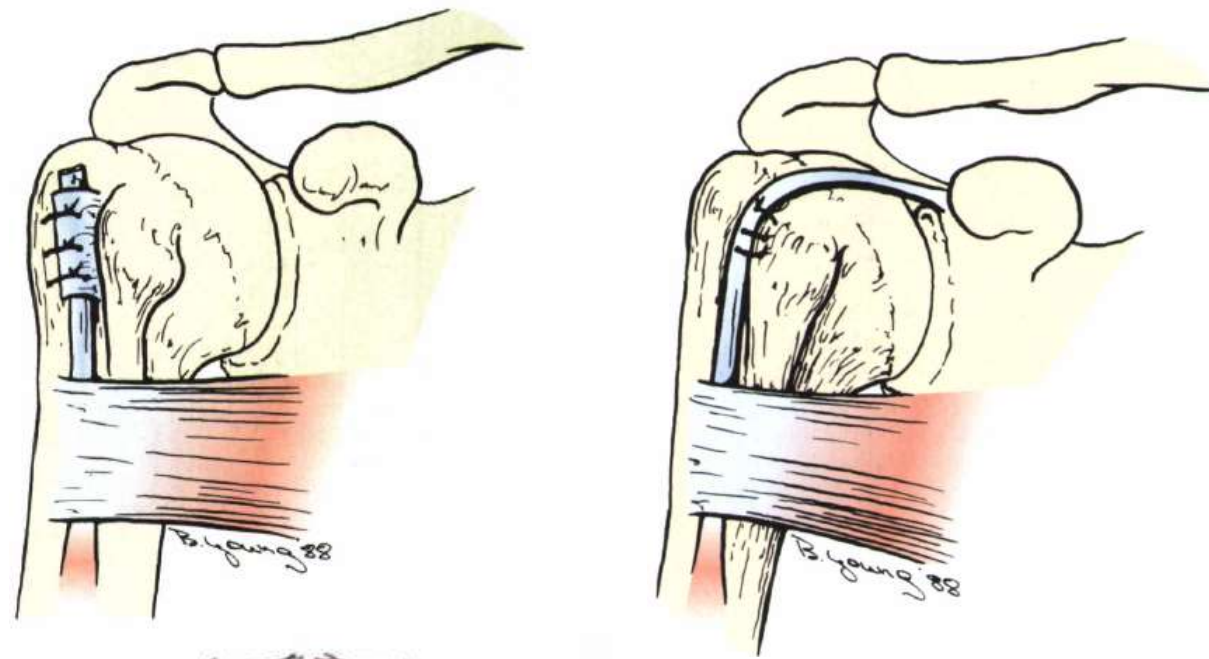


Tenotomy or Tenodesis?

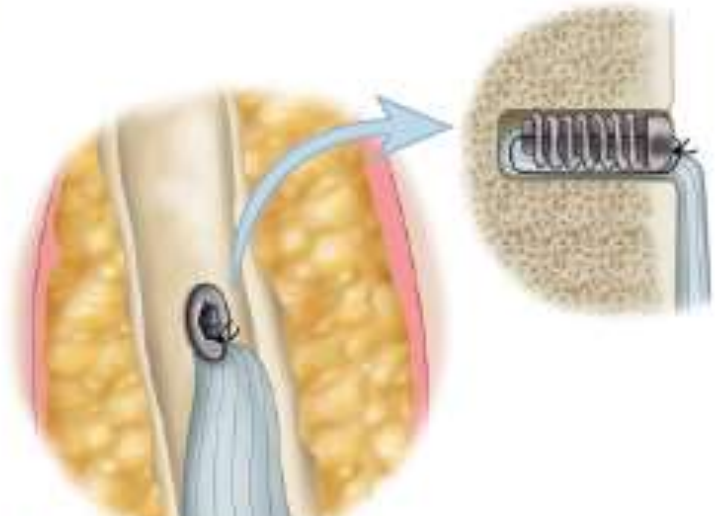
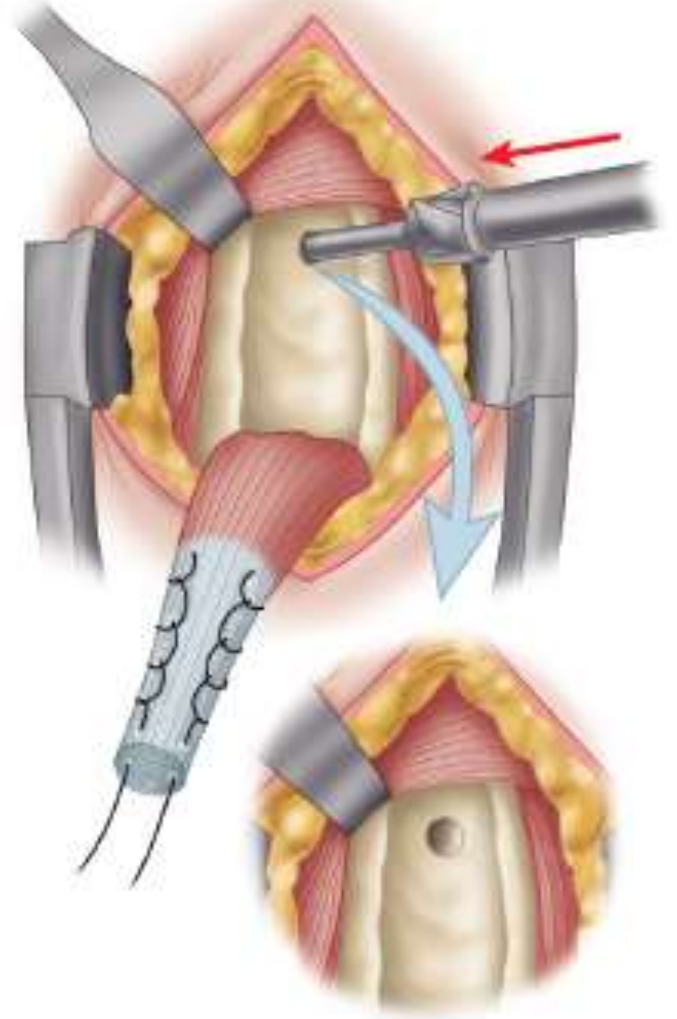
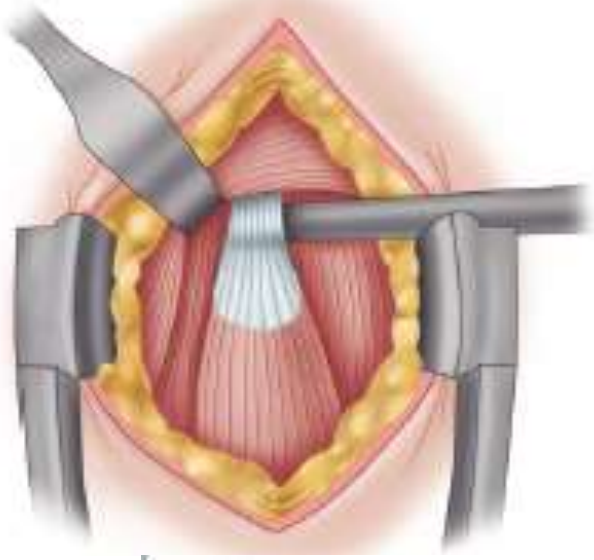
**Elderly
Sedentary**

**Young
Active**

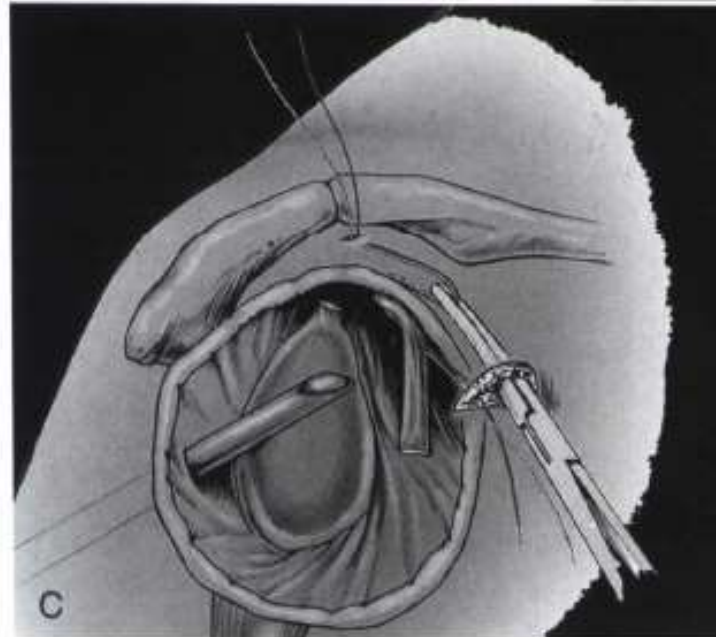
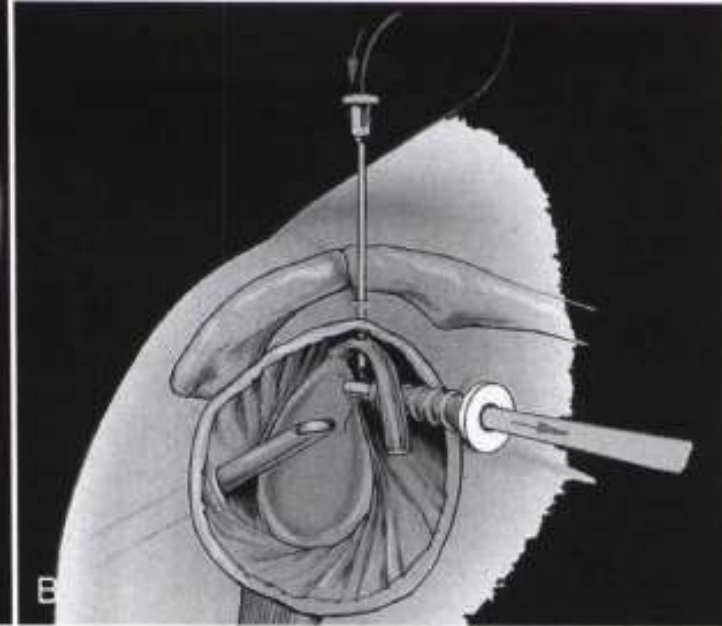
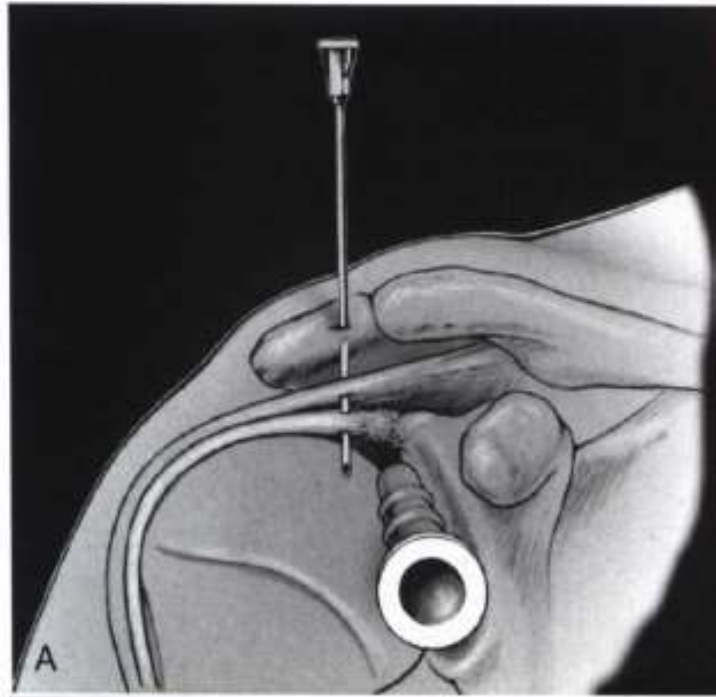
Tenodesis (EA or IA)



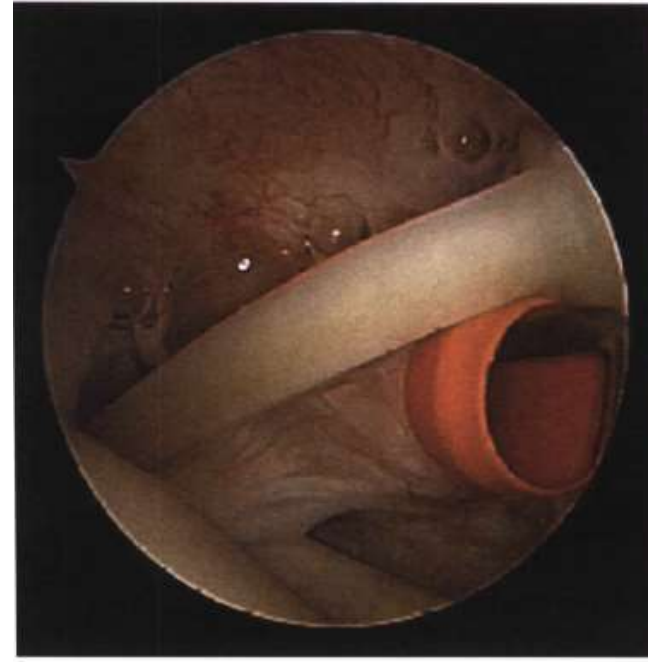
Tenodesis (EA or IA)



Tenodesis (EA or IA)



Summary



1. Proximal biceps lesions is common
2. Recognizing associated pathology and addressing it is key for success
3. Consider patient for biceps Tenotomy or tenodesis

Thank you for attention