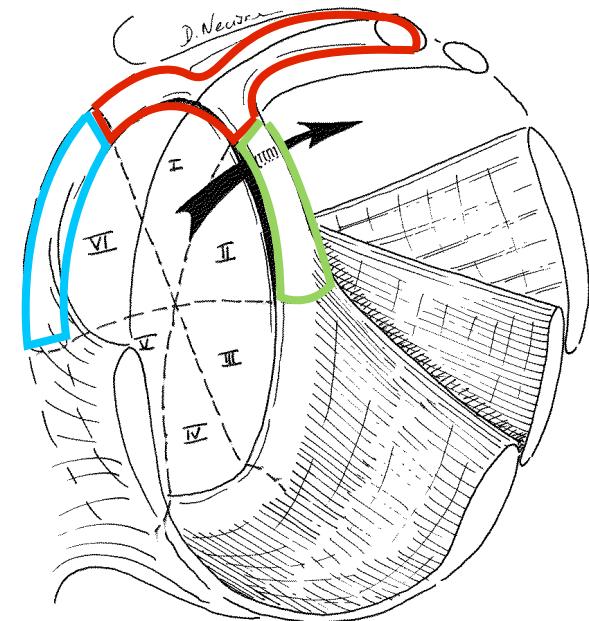


LABRAL LESIONS in stable shoulders

D.NERISSON – Y.LEFEVRE

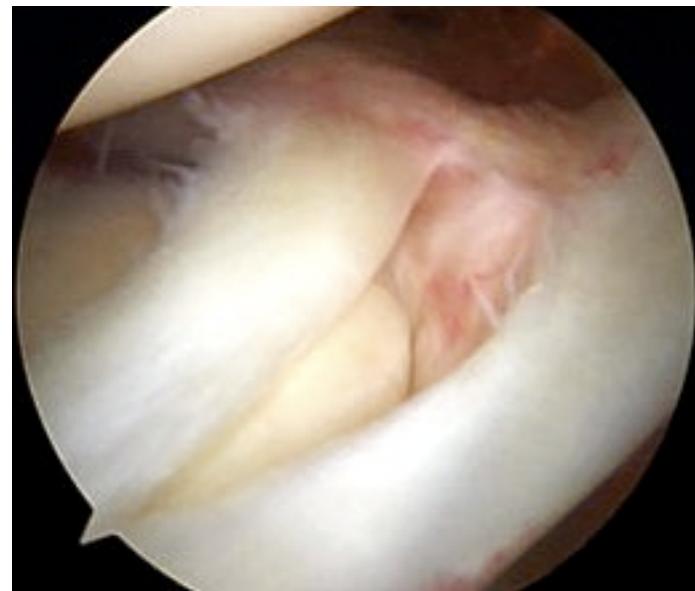
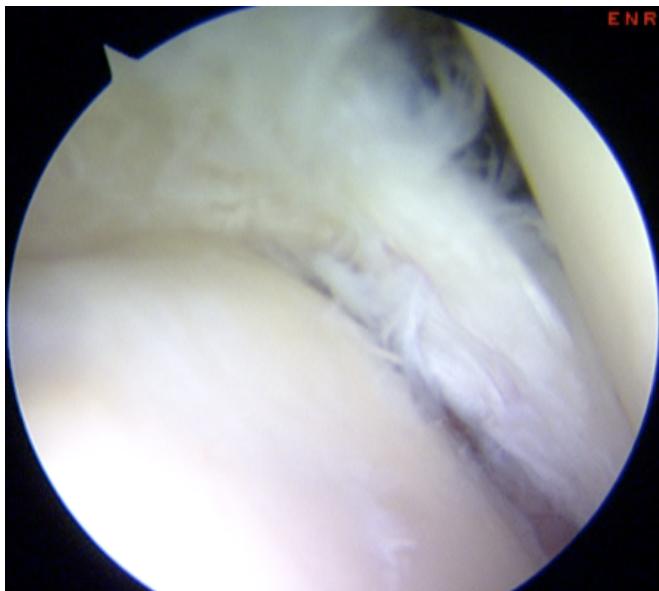
- I/sup: Labrum + Biceps = SLAP
- II/ant sup: Labral anat variants
- VI/post sup: Walch's post sup glenoid syndrom

III – IV – V/ inf =labrum in shoulder instability (ant / post)



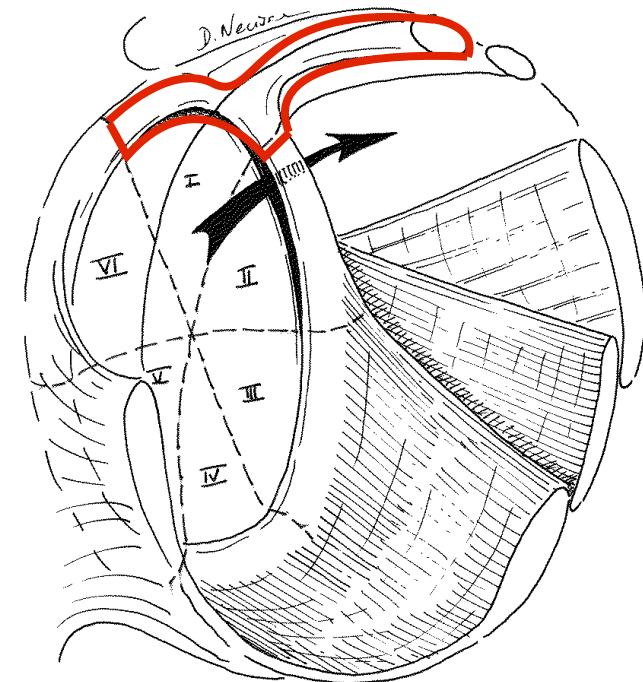
I. SLAP lesion

What's new?



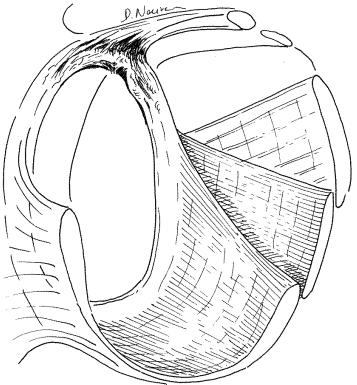
Arthroscopic Classification: Snyder 1990

SLAP = Superior Labrum
Anterior–Posterior

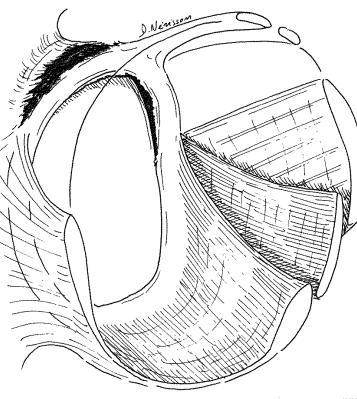
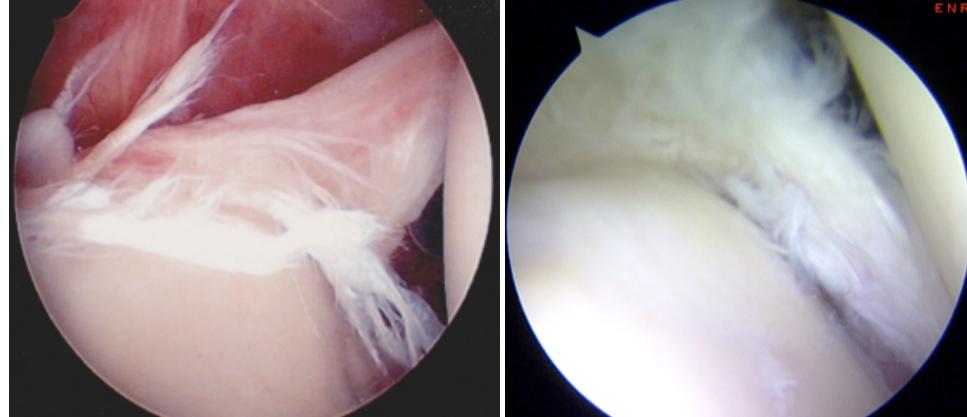


- 1990-00: we saw SLAP everywhere...
- 2000-10: we saw hardly ever SLAP...do they really exist ?
- and now? what's the situation? what's the best ttt ?

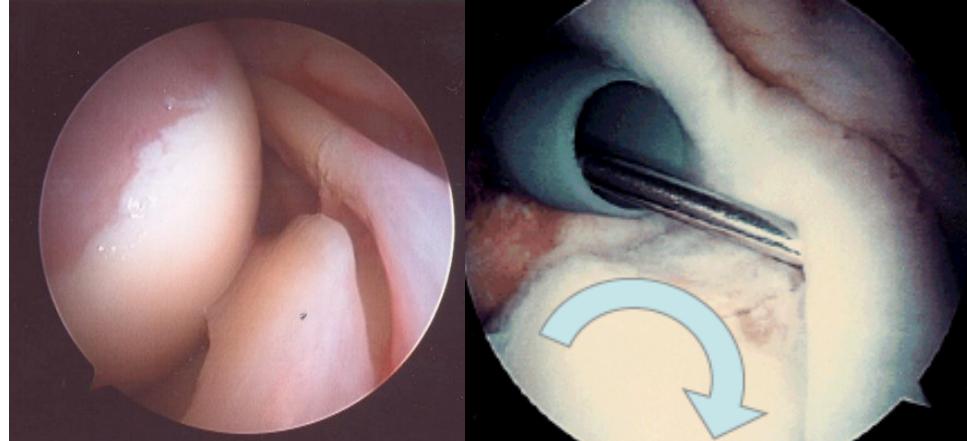
Snyder Classification



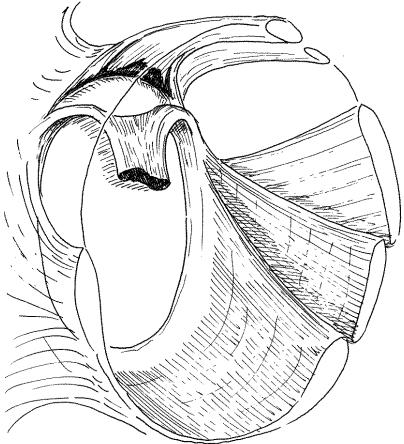
Type 1:
degenerative
fraying
aging process
24%



Type 2:
Significant
detachment
L + Bi
55%



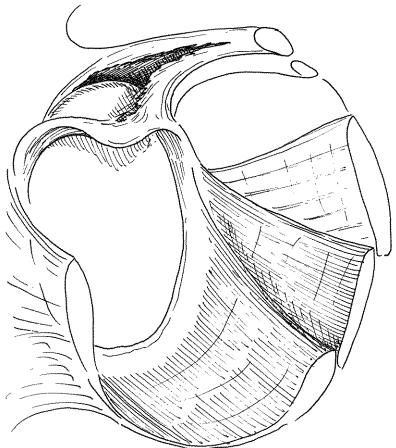
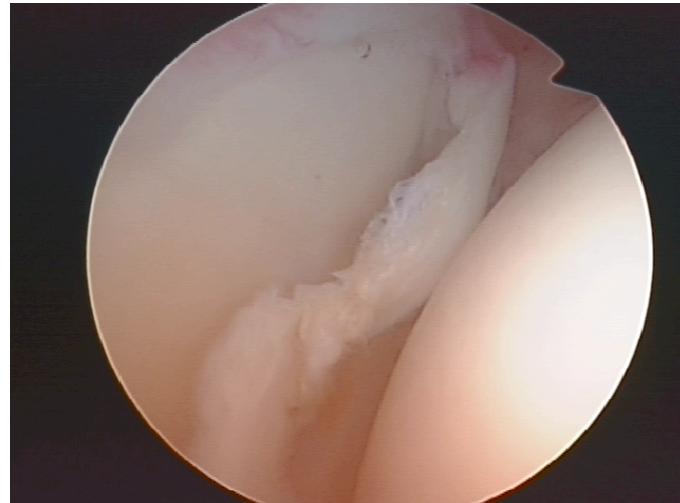
Snyder Classification



Type 3:

Bucket-handle
tears of L only

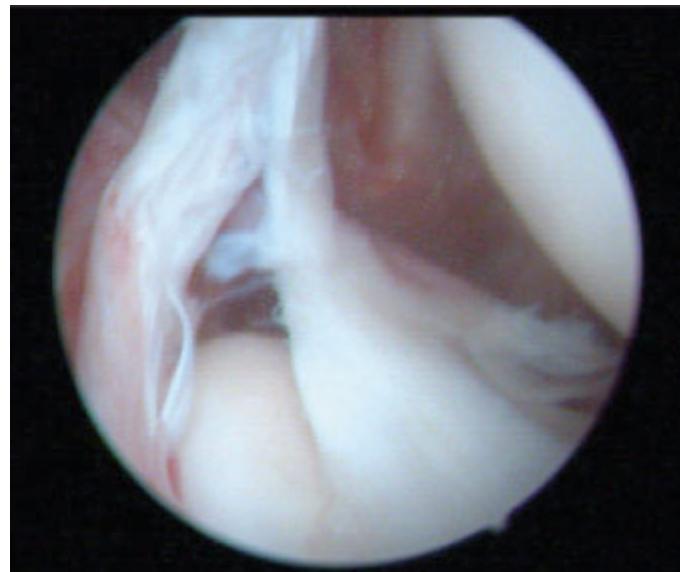
9%



Type 4:

Bucket-
handle tears
of L and Bi

10%



SLAP: usual patient's history

- trauma's mechanism:
 - traumatic event
fall on the hand in flex+ABD
→ LBi compression or traction
by humeral head
 - repetitive overhead athletic use



- Context:
 - young patient with mechanic pain
 - sometimes workers ...



SLAP: Physical examination

Many provoked test have been reported...

Active Compression rotation test (O'Brien)

Biceps load test (Kim)

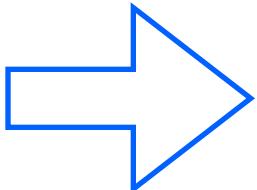
Cranck test

Kibler anterior slide test

Mayo shear test

Yergason test ...

... but they offer a poor specificity, except for their authors....



No single test can reliably diagnose a symptomatic SLAP lesion

SLAP: Clinical diagnosis

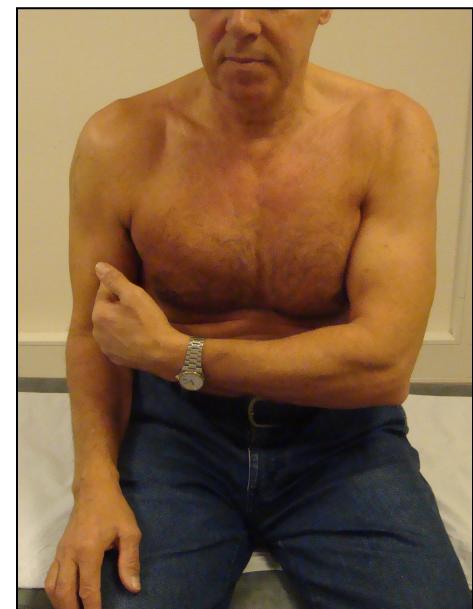
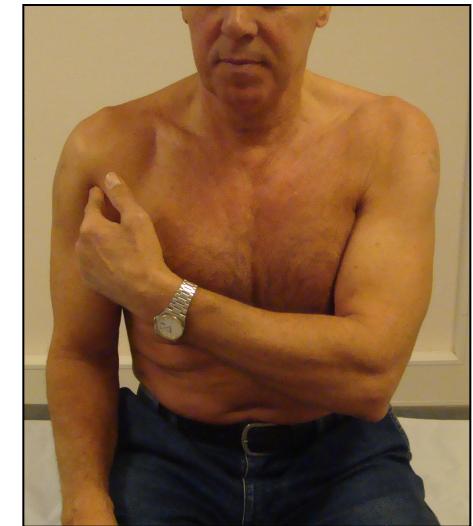
“Suspicious context“:

- mechanical pain (click) + + +
- bicipitals signs
 - ant pain toward the arm
 - provoked bicipital groove's pain
- history of specific trauma
- overhead throwing patients
- negative test of instability and cuff

SLAP: Clinical diagnosis

“Suspicious context“:

- mechanical pain (click) + + +
- bicipital signs
 - ant pain toward the arm
 - provoked bicipital groove's pain
- history of specific trauma
- overhead throwing patients
- negative test of instability and cuff



SLAP: Images

CT-scan



MRI gadolinium



Reliable, but require experienced evaluators +++

SLAP: diagnosis

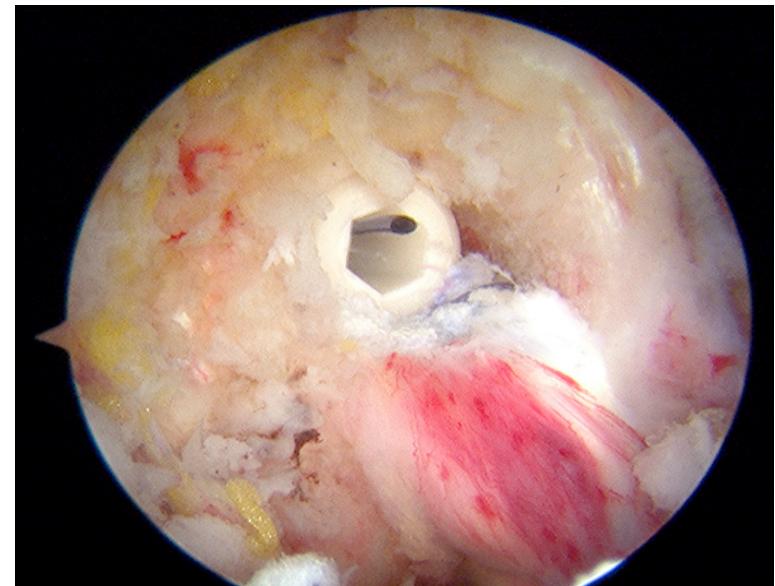
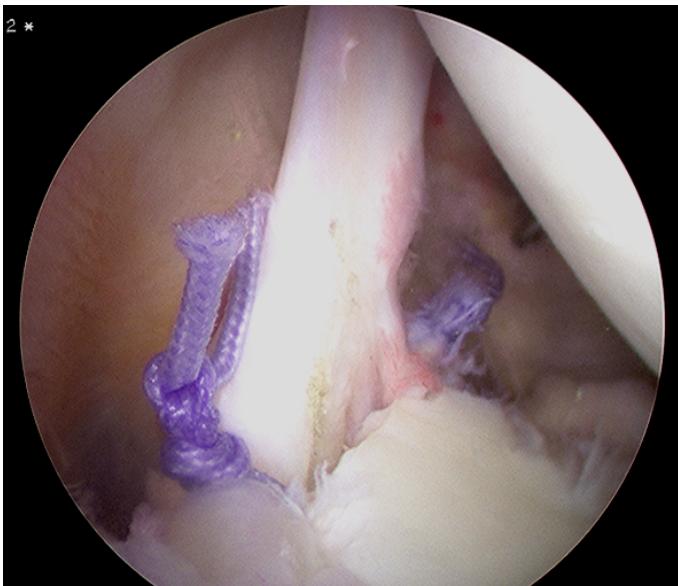
suspicious clinical context
Images with arthrogram
arthroscopic exploration

SLAP: frequency

Quite common in overhead sports
but often non operate

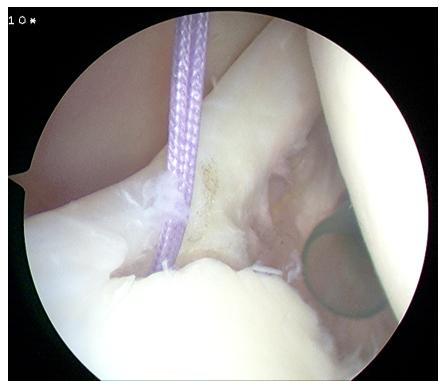
SLAP 2 type Surgical procedures

Anatomical Labral repair
Biceps tenodesis



Surg proced: labral repair

suture anchor techn: 1 (or 2)



overhead sports returning: 48 to 91%

Cohen 2006 – Ide 2005 – Kartus 2004 – Kim 2002

O'Brien 2002

* Burkhart 2006: prospective level IV study/
long term results = 87%

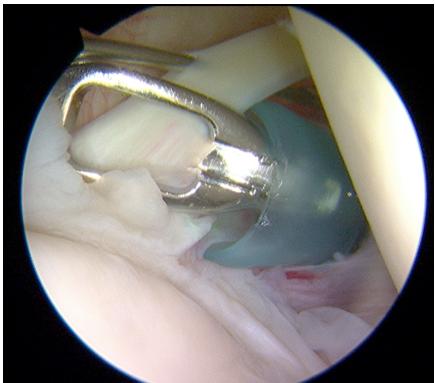
** Gorantla 2010: systematic literature review
only about 64%

*** Schrøder 2012: prospect level IV, long term
results = 88%



Surg proced: biceps tenodesis

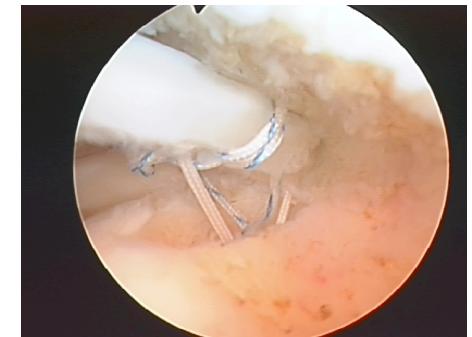
Interference screw / outside



anchor / inside
lasso loop suture techn



Lafosse

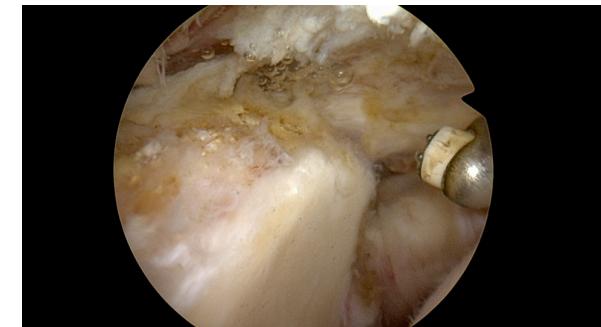
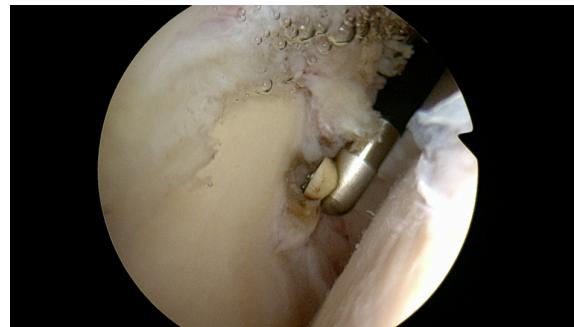


Boileau
(JSES 2000 – Arthroscopy 2001)

Golish (Arthroscopy 2008)
– Kusma (JSES 2008)
– Ozalay (Arthroscopy 2005)

Surg proced: “T“ biceps tenodesis

sup labral-biceps complex resection with/without suture (J Arthroscopy sept 2013)

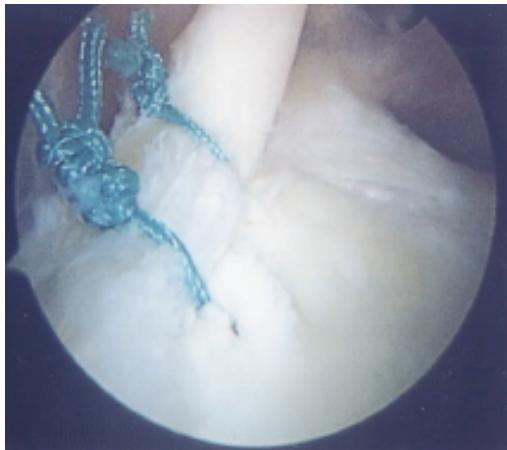


cutting anterior and posterior labral's fixed part



SLAP freed from glenoid margin – locked in the enter of bicipital groove

treatment controversies: how to treat a SLAP in 2015?



VS



SFA 2006

not randomized multicentric study

57 patients (SLAP 2) – 70% sportsmen

33 SLAP repair

20 Bi tenodesis

5

number of revision

0

57%

satisfaction rate

90%

39%

athletes get back
to their preinjury
level of play

64%

P. Boileau

(Am J Sports Med 2009)
Level III prospective study

only 25 Patients isolated SLAP 2

10 SLAP repair

37y

average age
(non randomized patients)

15 Bi tenodesis

52y

40%

subject satisfied

80%

20%

return of previous
level of sports

87%

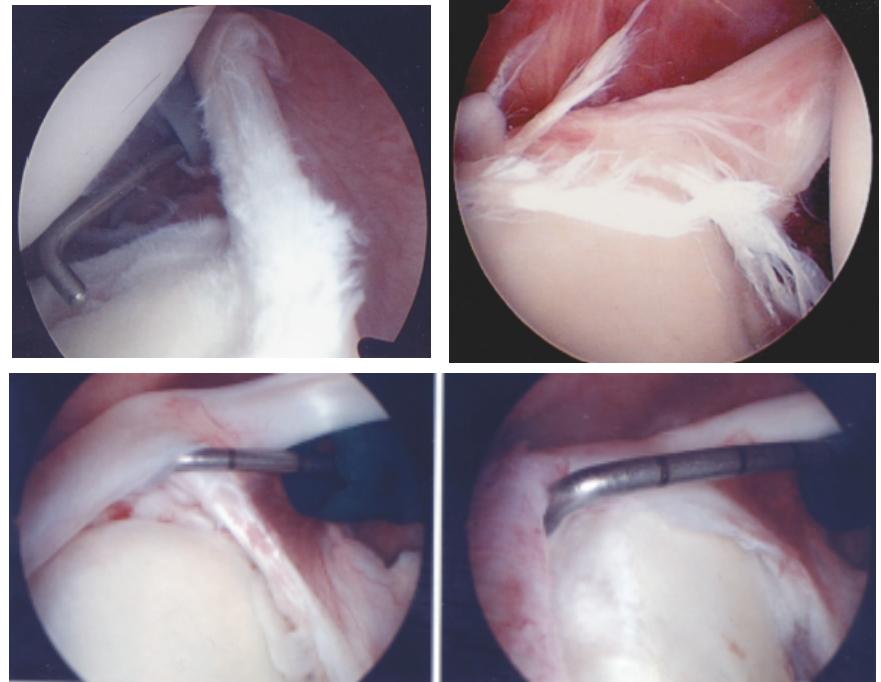


40% revision
by Bi T

significantly
better R

Failures of repair: why?

- labral delamination
- biceps synovitis
- non healing labrum
- overdiagnosed SLAP
and unnecessary “fixed”
labrum...



Anatomic repair is often too stiff
→ ... pain?

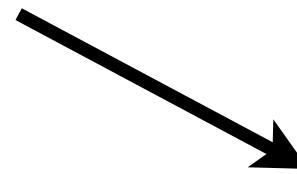
Algorithm of SLAP tears

SFA 2006 – Burns & Snyder 2011 – author's opinion

> 30y / ageing sportsmen...
inflammatory disorder

Associated SLAP 2,
SLAP 4

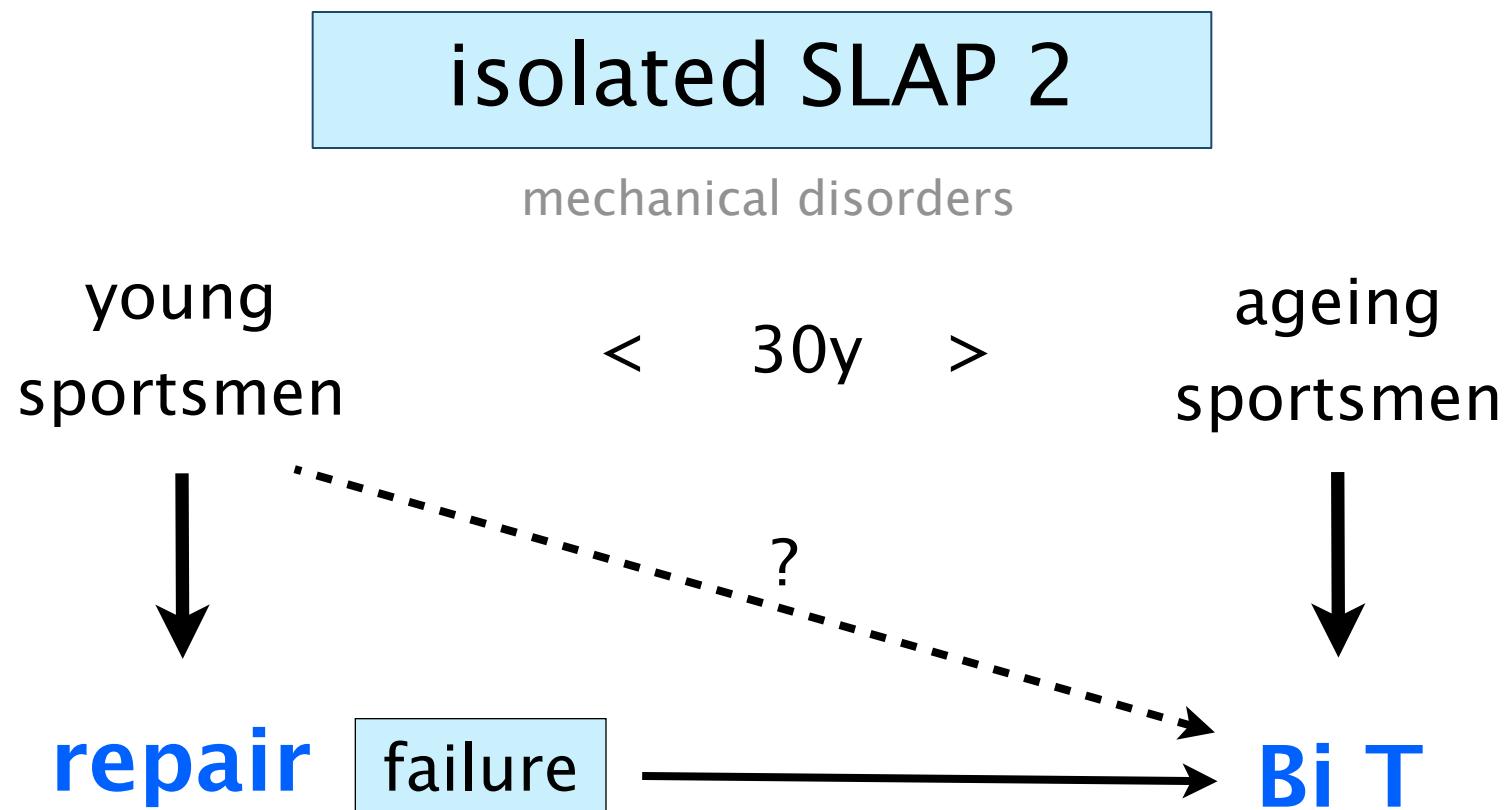
full thickness RC tears
degenerative Bi
degenerative labral
cartilage changes



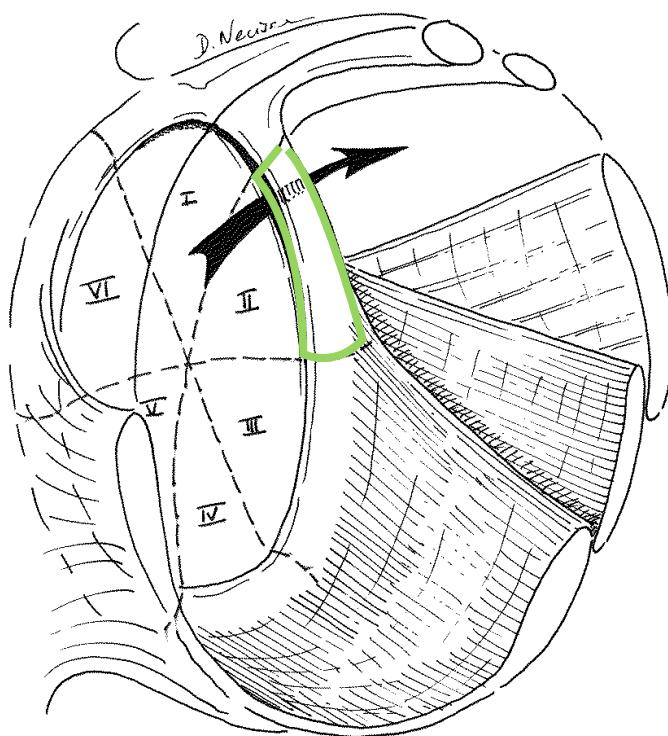
Bi T

Algorithm of SLAP tears

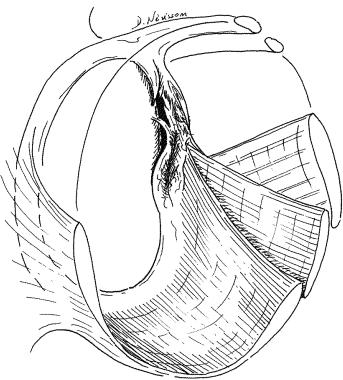
SFA 2006 – Burns & Snyder 2011 – author's opinion



II. Antero-sup labral changes lesions and anatomical variants



Ant sup Labral changes



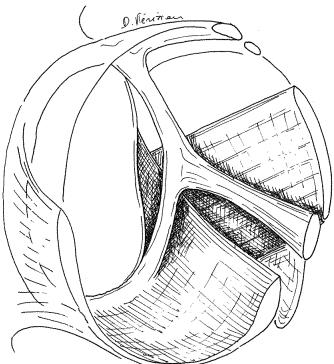
Andrew's lesion

1985: first description of a labral lesion in overhead athletes / often asymptomatic
→ no treatment

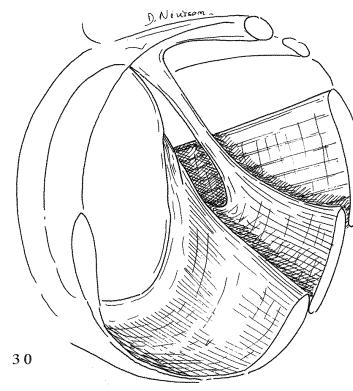
Sublabral foramen: anatomic variants



be carefull to inappropriate surgical intervention ++



MGHL “cordlike”
DePalma
9% of shoulders



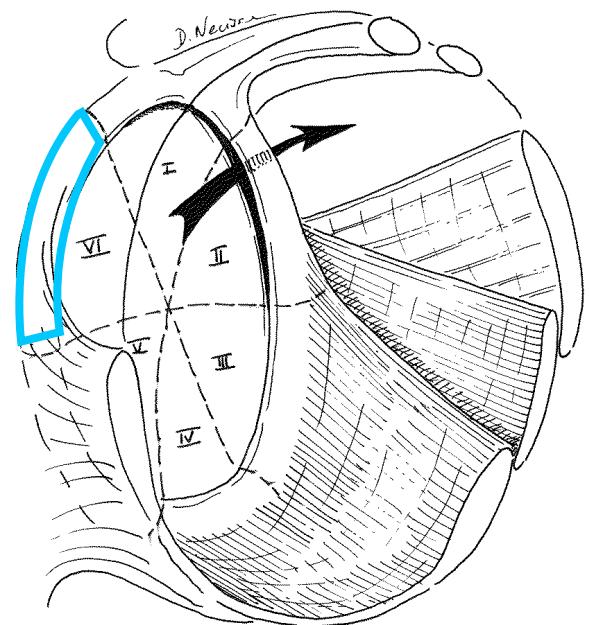
Buford complex
1,5% of shoulders

III. Postero-sup labral changes

Post sup glenoid impingement

Walch 1991

“Impingement between articular side
of the SS and post sup labrum in
armed arm position“



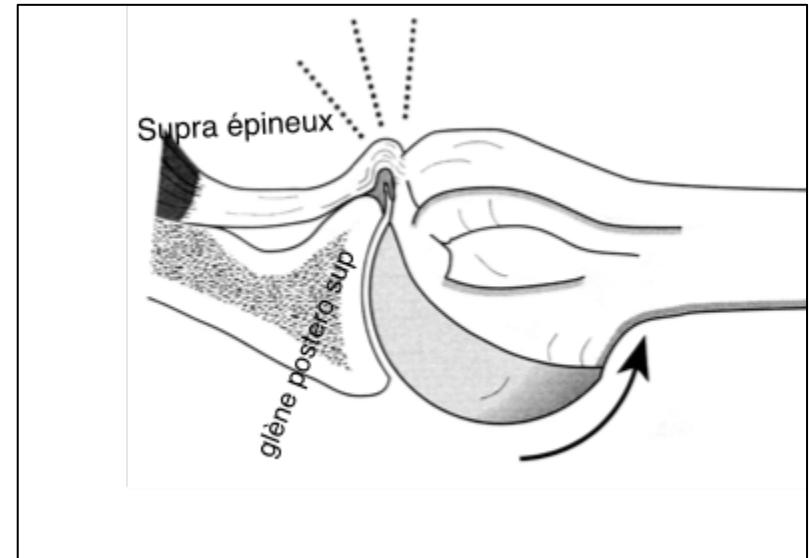
Post sup glenoid impingement physiopathology

Physiological SS entrapment
if armed movements overuse



Mirror lesions

- Artic side SS tears
- Post Sup labrum lesion ± bony spur of glenoid margin



PS glenoid impingt: patient's history

- only repetitive overhead athletic use
 - intensive/long term practice
 - dominant arm
- mechanical pain in armed position
 - end of throwing
 - dead arm sensation



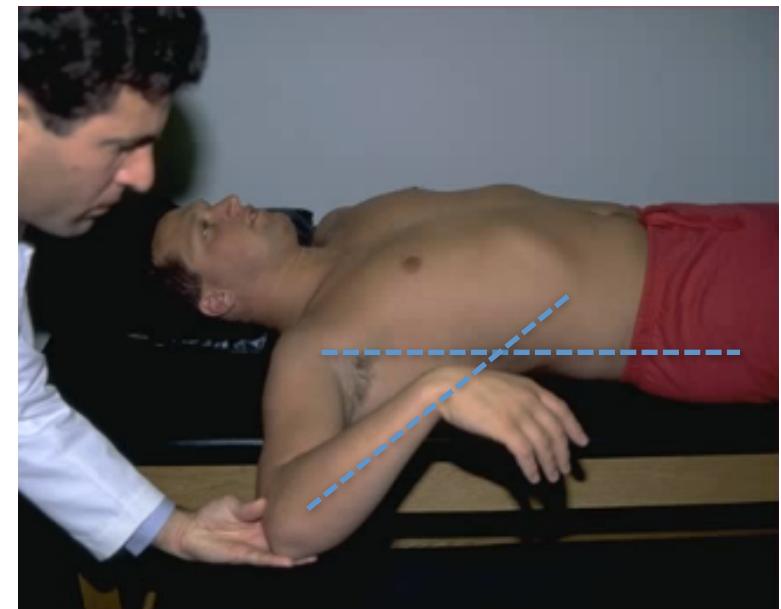
PS glenoid impgt physical examination

- no specific test
- provoked pain in armed position
- often range of motion changes

$RE_2 \uparrow$ et $RI_2 \downarrow$

= throwing sports adaptation

- ant capsular laxity
- post capsular retraction



PS glenoid impgt + diagnosis: images

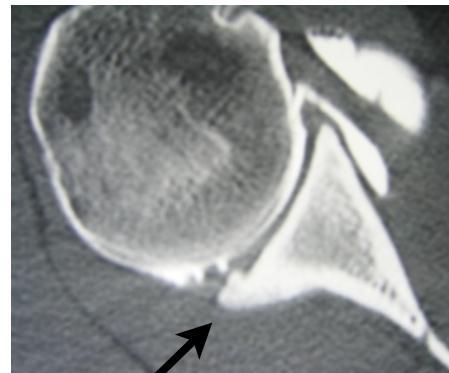
Radio



(Bennett 1941)

post bony spur

CT scan



MRI gadolinium



SS partial tears

PS glenoid impgt treatment

- physiotherapy + + +



- arthroscopic treatment:
 - Indication: failure of physiotherapy
 - what's new?

PS glenoid impgt arthroscopic first treatment

- isolated debridment labrum + cuff
 - Walch 1992, Payne 1997, Sonnery-Cottet 2002, Riand 2002
 - Only 40% satisfied
 - return to preinjury level of play 15 – 50%

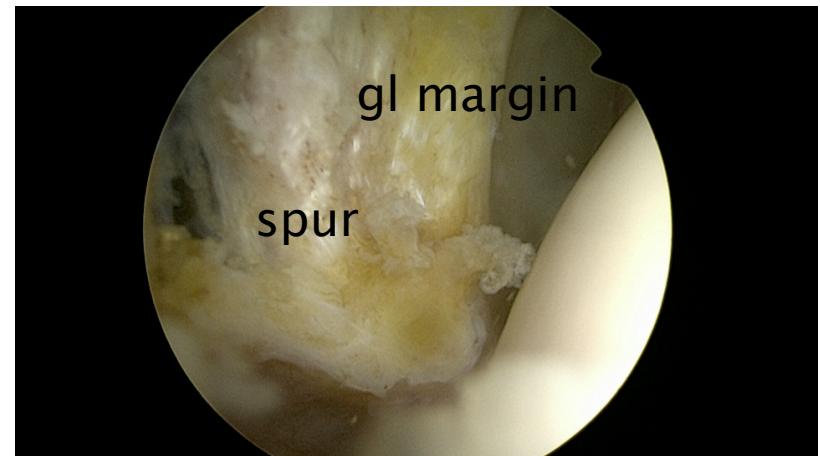


– post bony spur non treated ++

PS glenoid impgt arthroscopic recent treatment

Levigne 2012

- labral debridment
 - often resection
- glenoplasty
 - bur resection
 - spur ± margin
- cuff treatment
 - debridment
 - repair



PS glenoid impgt arthroscopic recent treatment

Levigne 2012 / Results

27 overhead sports athletes

average age 27y

Follow up 47m

return of previous level of sport: 69%

loss of sport level / satisfied: 23%

unsatisfied : 8%

No complications



Labral lesions treatment in stable shoulders

- Labrum ant sup: no touch
 - SLAP: biceps tenodesis
- PS glenoid impingement: global ttt with glenoplasty
 - both → level I/II studies

Merci beaucoup
dankre viel mal