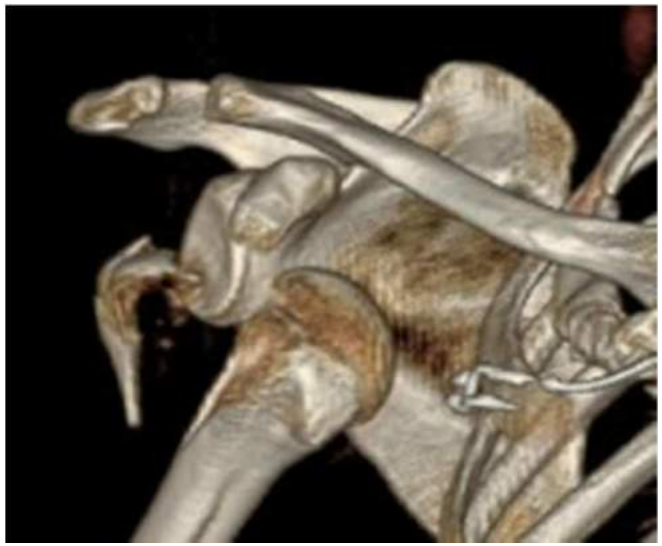
Ente Ospedaliero Cantonale

MR Imaging of shoulder instability: What should I know and what can I do as a surgeon



PD Dr. Chr. Candrian

Introduction

- Shoulder: most unstable joint (50%)
- 3 x m > f
- Incidence in TICINO: 600 dislocations / year
- Instability: 2% (TI 6000)
- Mechanism : external rotation e abduction

Instability: Classification

- Antero-inferior/posterior/cranial/erecta
- unidirectional/ multidirectional
- volontary /non volontary (transient/recurrent/permanent)
- habitual: without adequat trauma: displasia, malrotation glenoid, hyperlaxity ecc.)

-> today: antero-inferior instability

Introduction

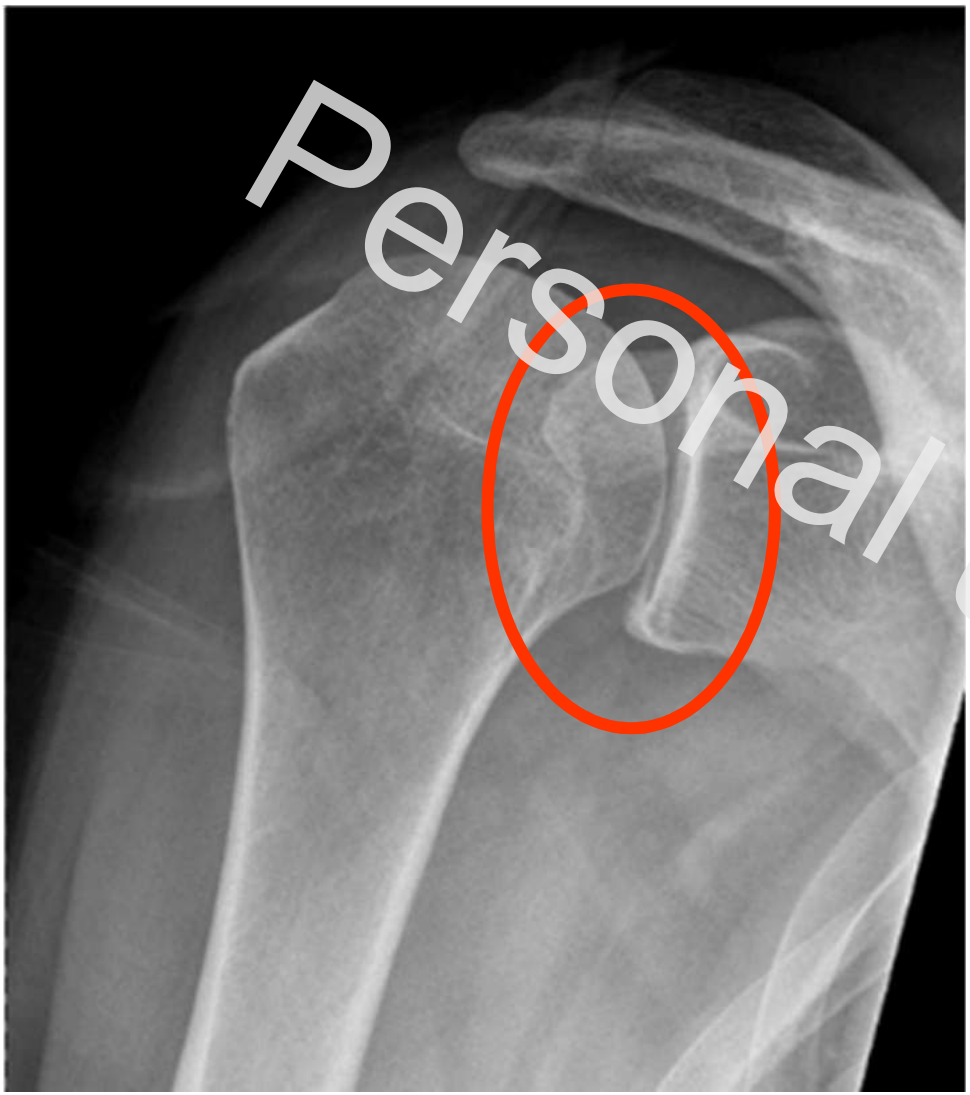
Definition:

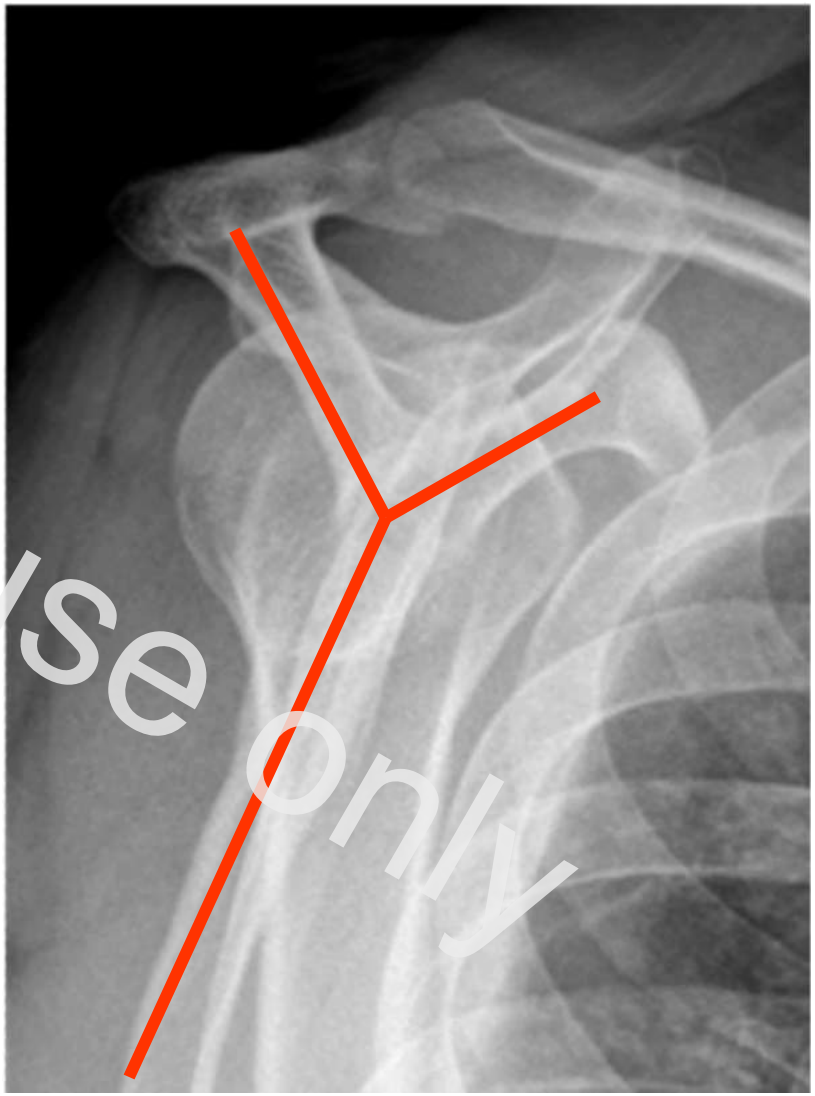
- Acut event (adequate trauma?)
- Chronic (more than 2 dislocations)

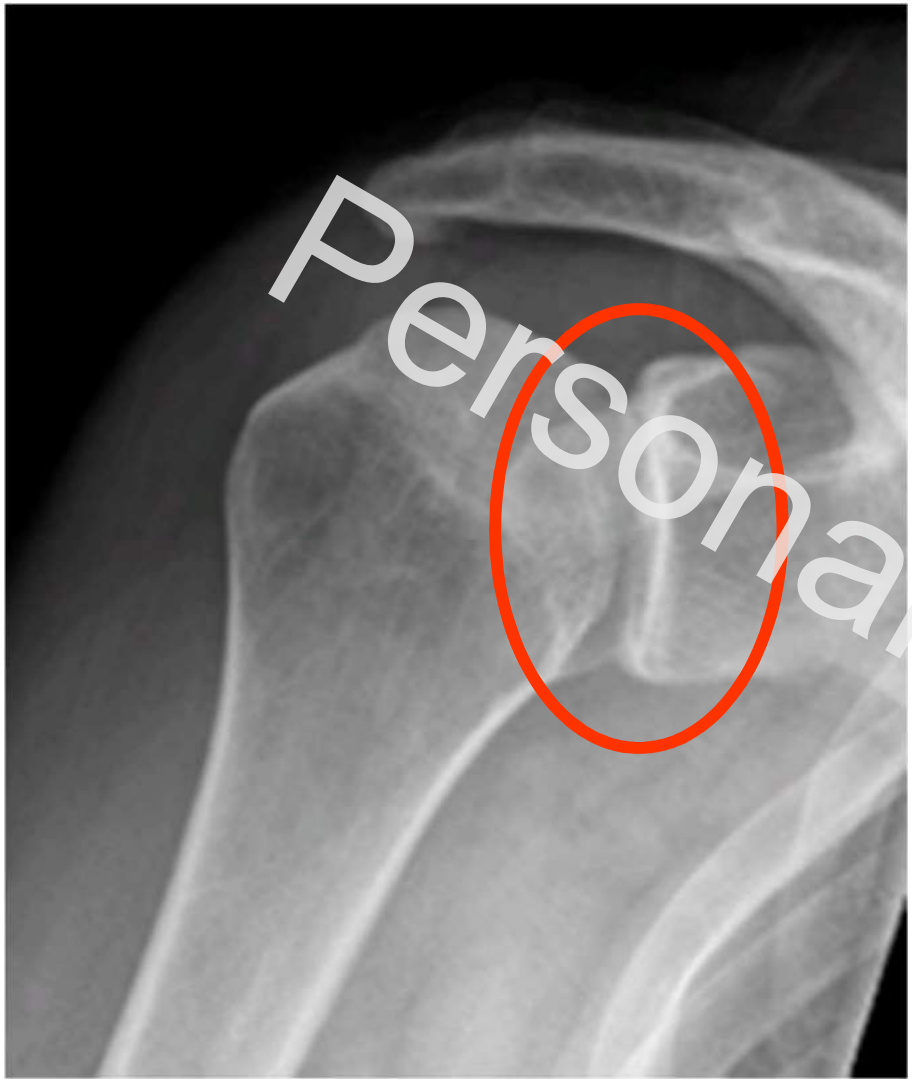
Diagnostics for shoulder instability?

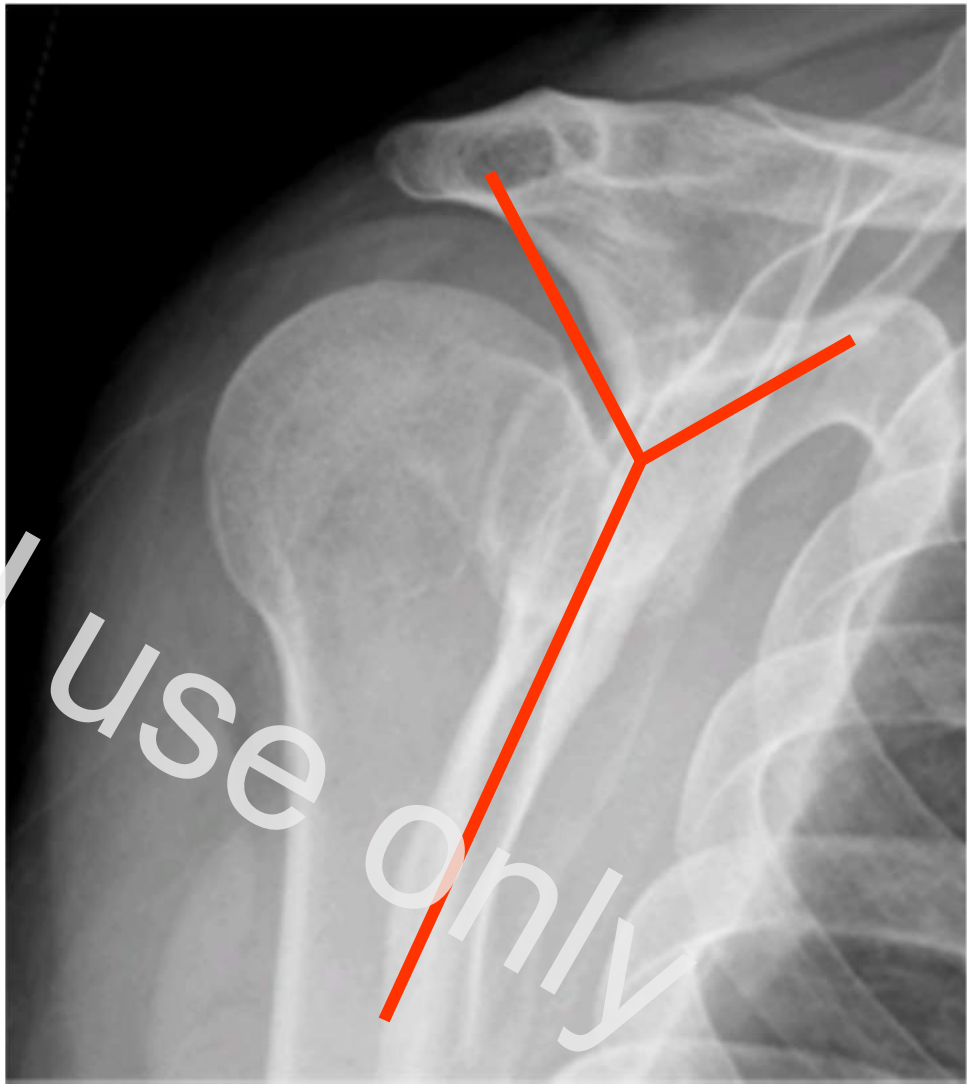
- Conventional x-ray (acut and chronic)

Diagnostics for shoulder instability?

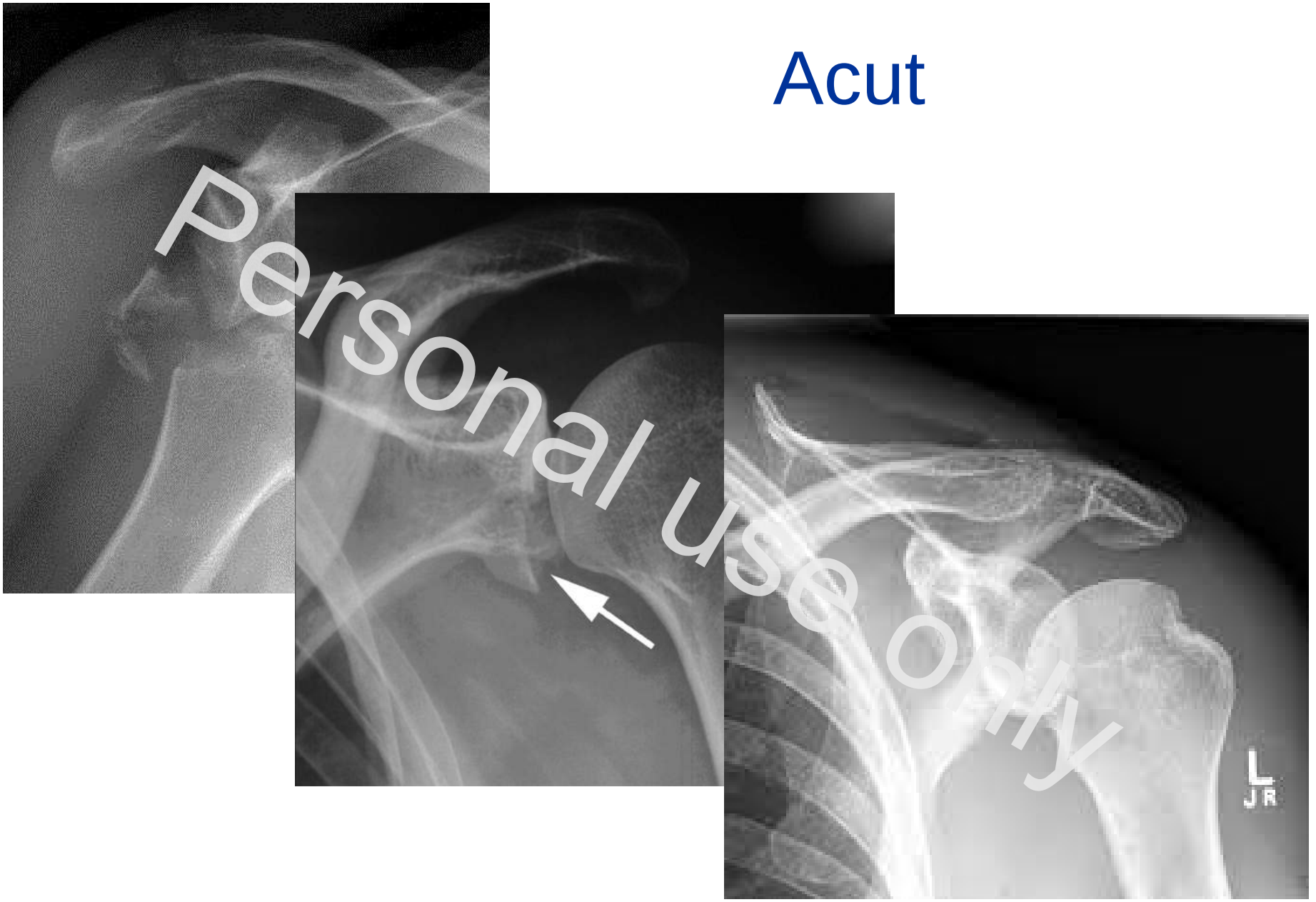








Acut



Diagnostics for shoulder instability?

- Conventional x-ray (acut and chronic)

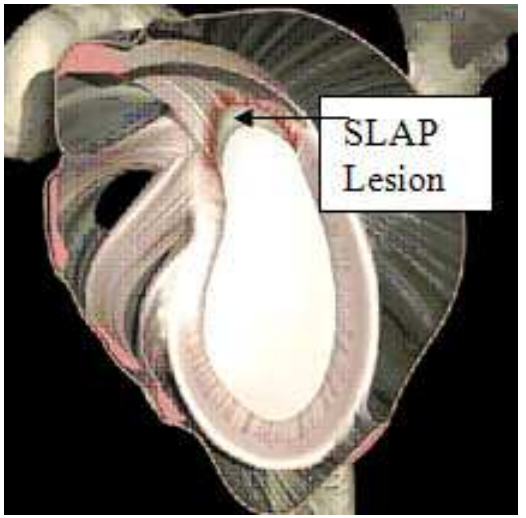
- When MR-Arthrography (not MRI) ?

1. Acut: immediately: man < 30 years, women < 20 years or after 2-3 month if painful…..

2. Chronic always (CT scan?.....)

Associated lesions

- Lesioni SLAP (superior labral anterior posterior): 15%



- Cuff tears

Associated lesions: Rotator cuff

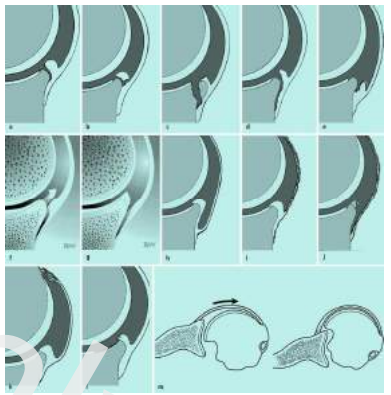
- Cuff tears:
  - < 30 years: 9%
  - > 40 years : 30%
  - > 60 years: 80%

- Cuff tear -> increase risk of dislocation by a factor 30 ! -> surgery?

Lesions of capsulo-labral complex

Perthes: labrum torn but still attached, it can be missed

ALPSA: **A**nterior **l**abroligamentous **p**eriosteal **s**leeve **a**vulsion lesion

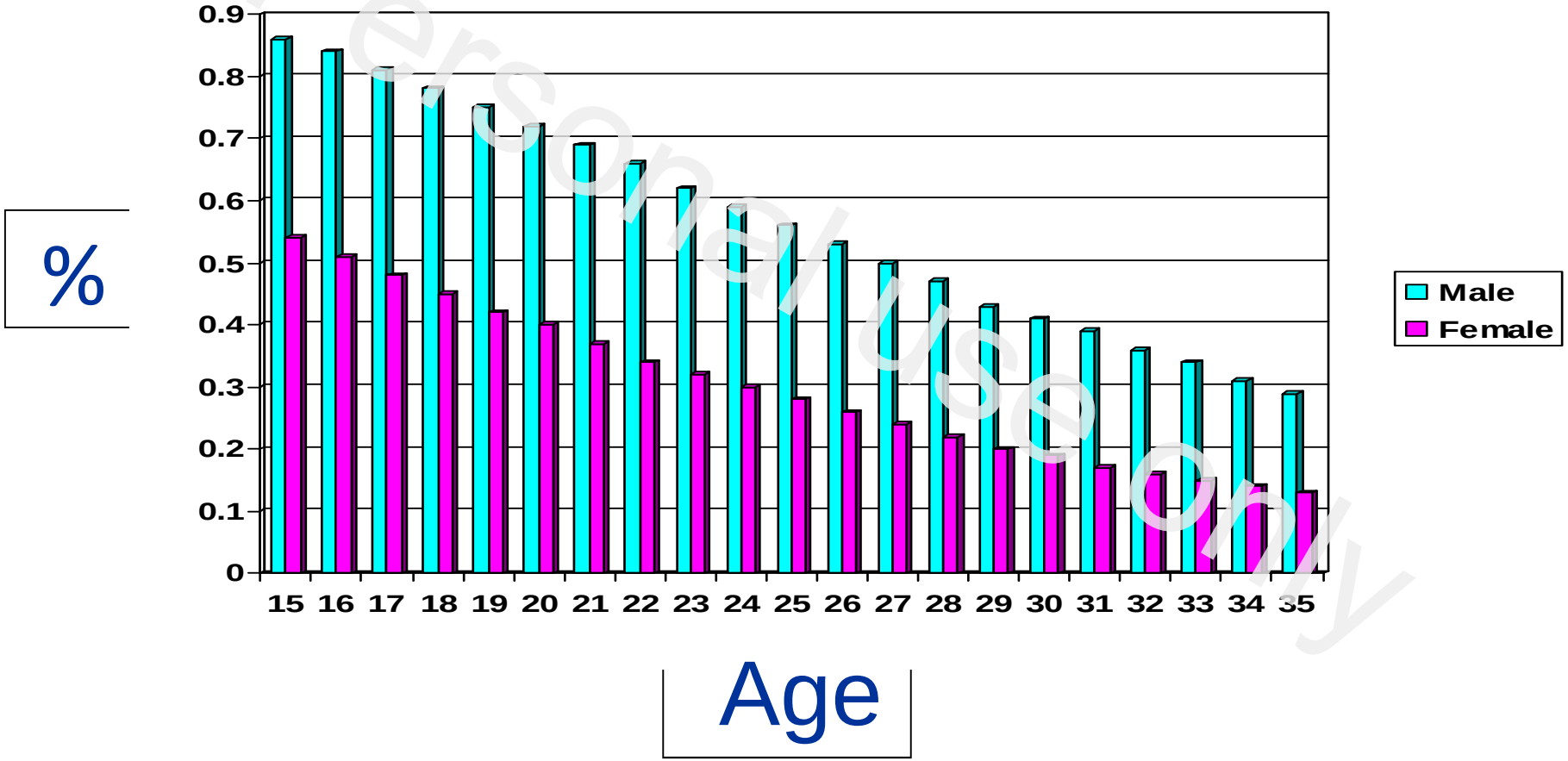


GLAD: **G**lenoid **L**abral **A**rticular **D**efect

Bufort Complex: variant

HAGL: humeral avulsion gleno-humeral ligament

Risk of dislocation after first dislocation



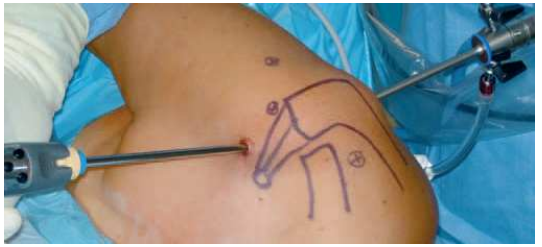
After a second dislocation???

> 90 %

Conservative treatment

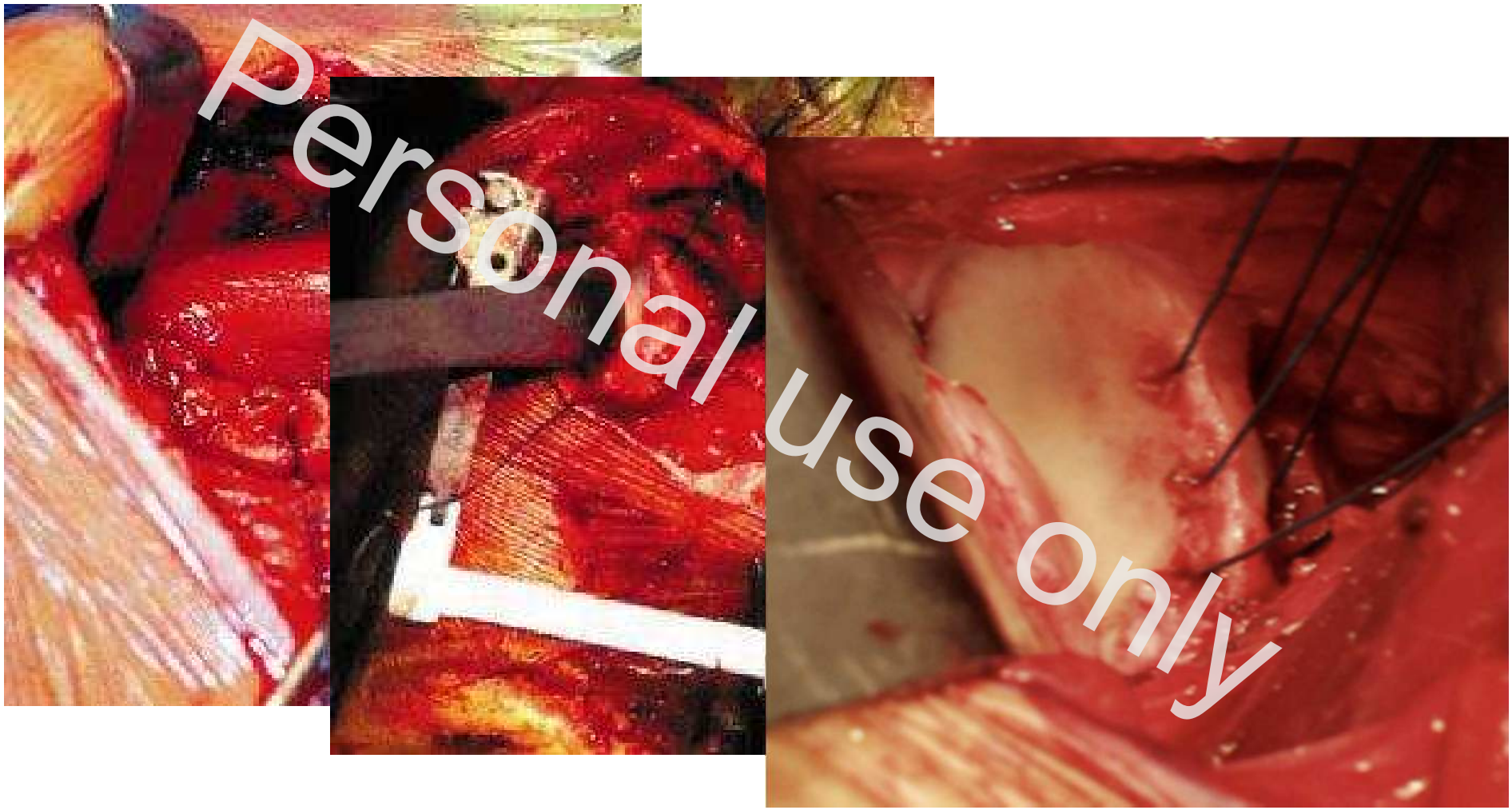
- Reduction: how? Local anestesia?
- If associated fractures (not tub.majus) in OR!
- Conservative treatment (Gilchrist):
  - Older patient 1 weeks
  - Younger patient 3 weeks

Surgery

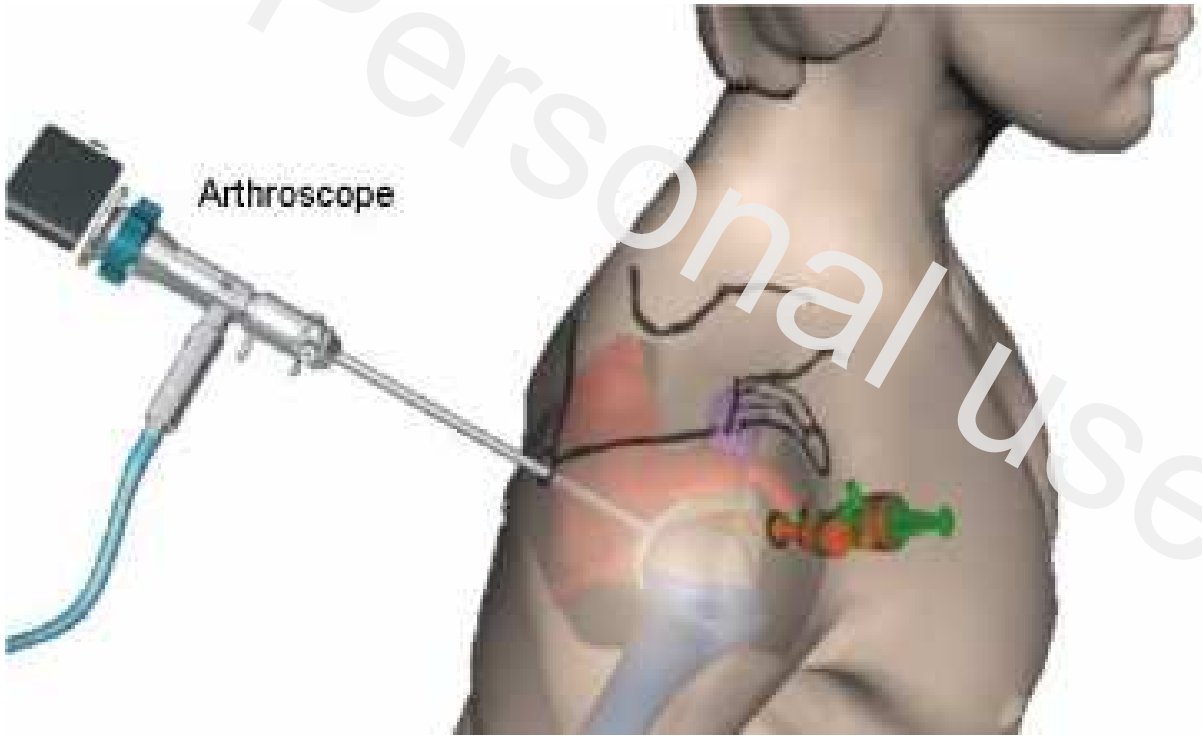


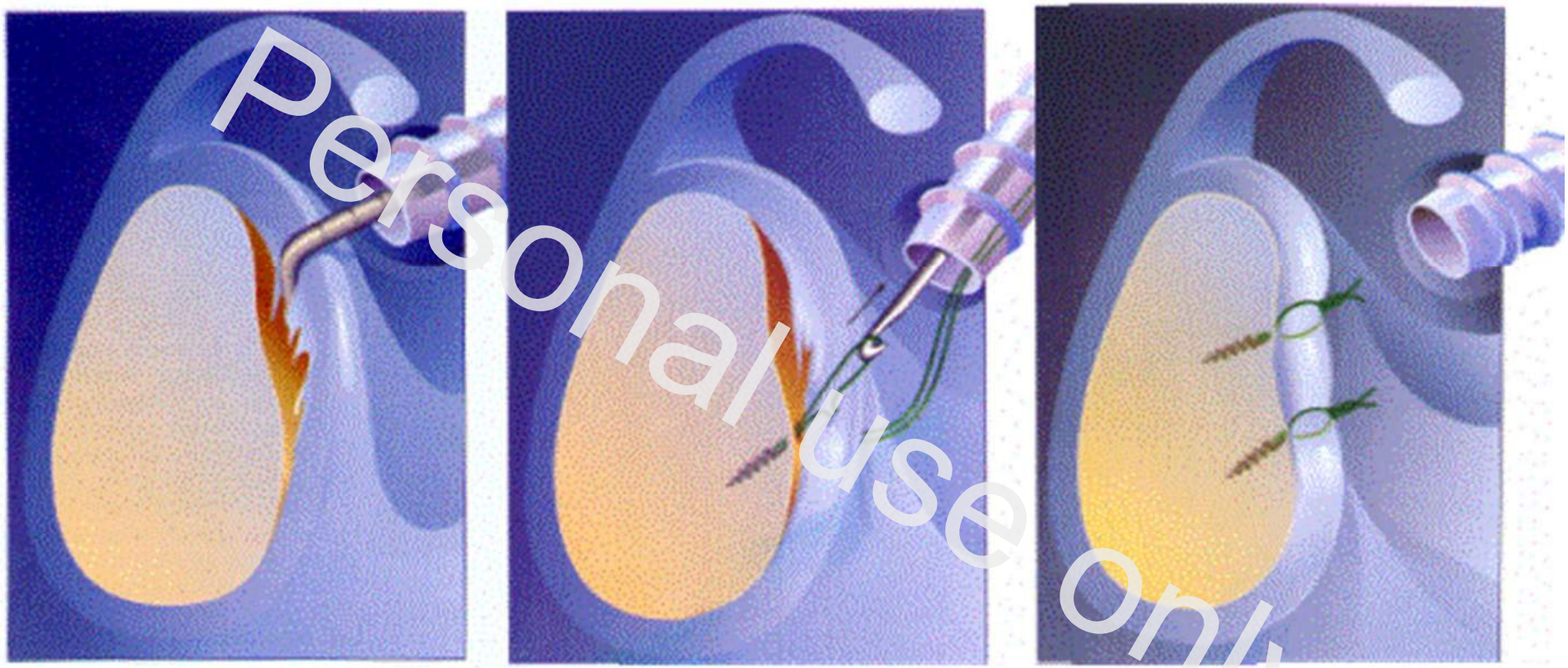
- In past > 30 different techniques

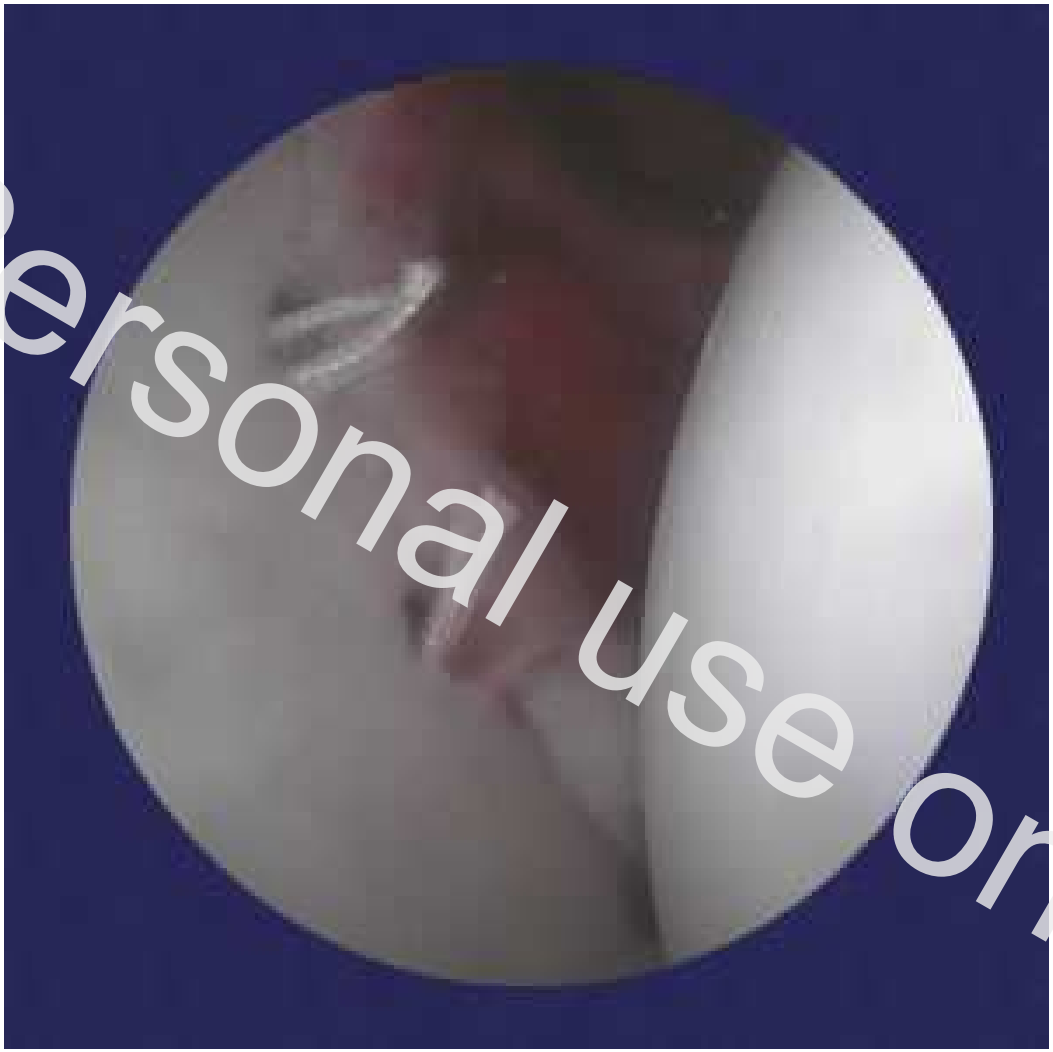
Open Bankart



Anterior arthroscopic stabilisation

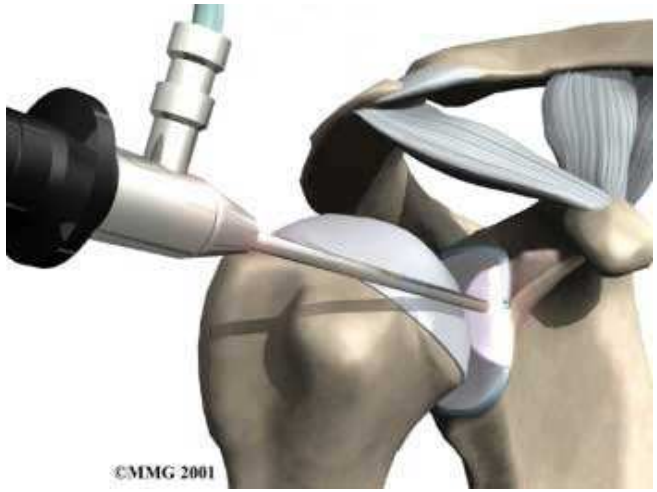






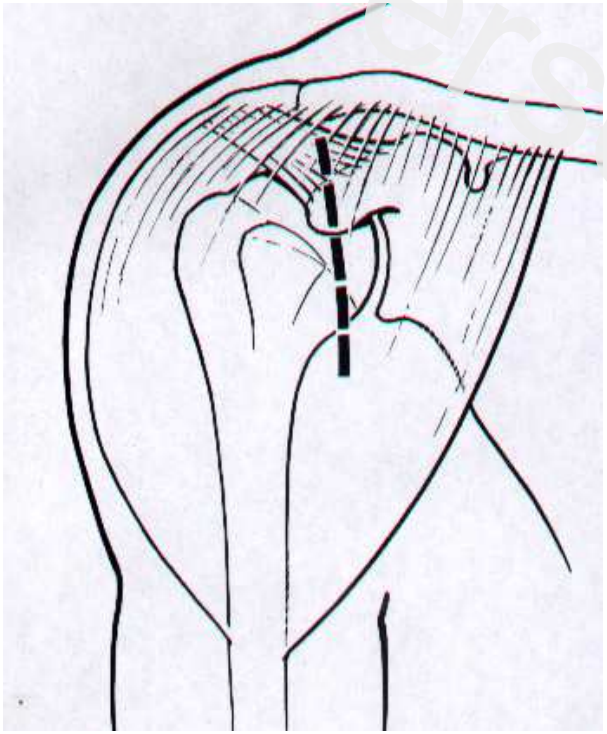
Aftertreatment

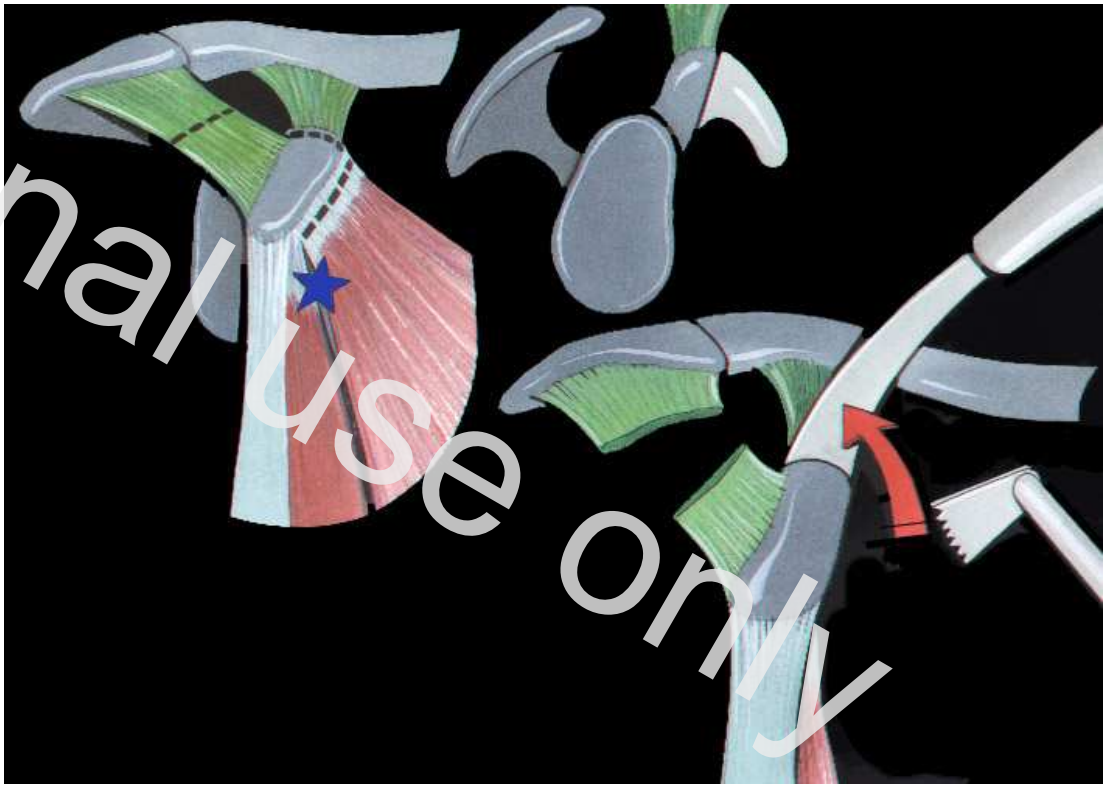
Results



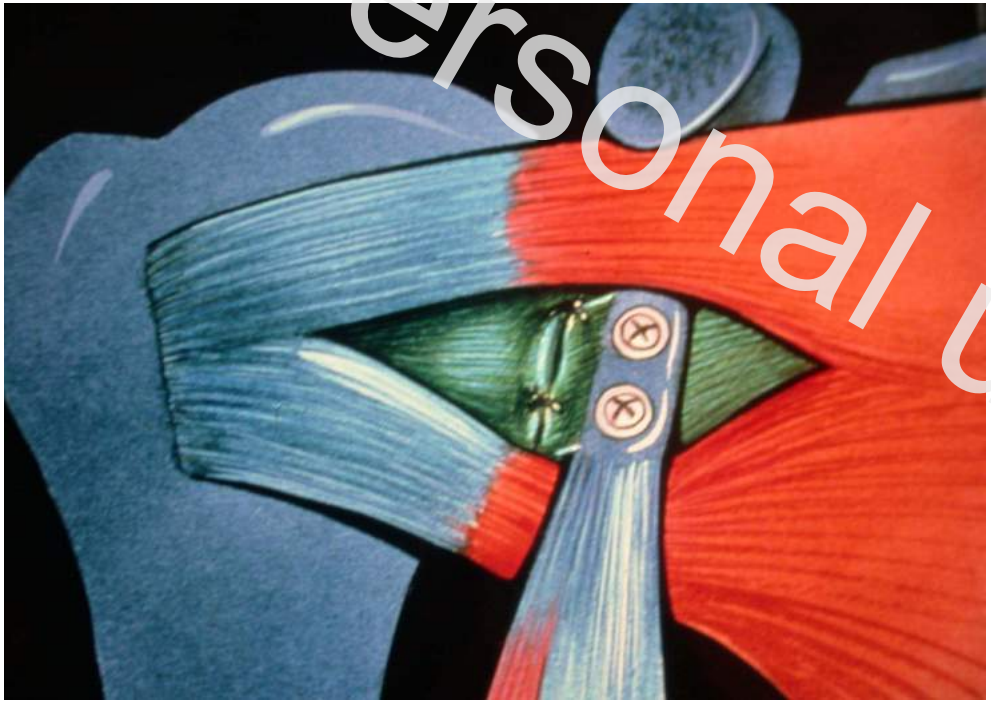
- Day surgery!
- Complications < 1%
- Recurrence > 10 %
- Fast recovery

2: Latarjet procedure

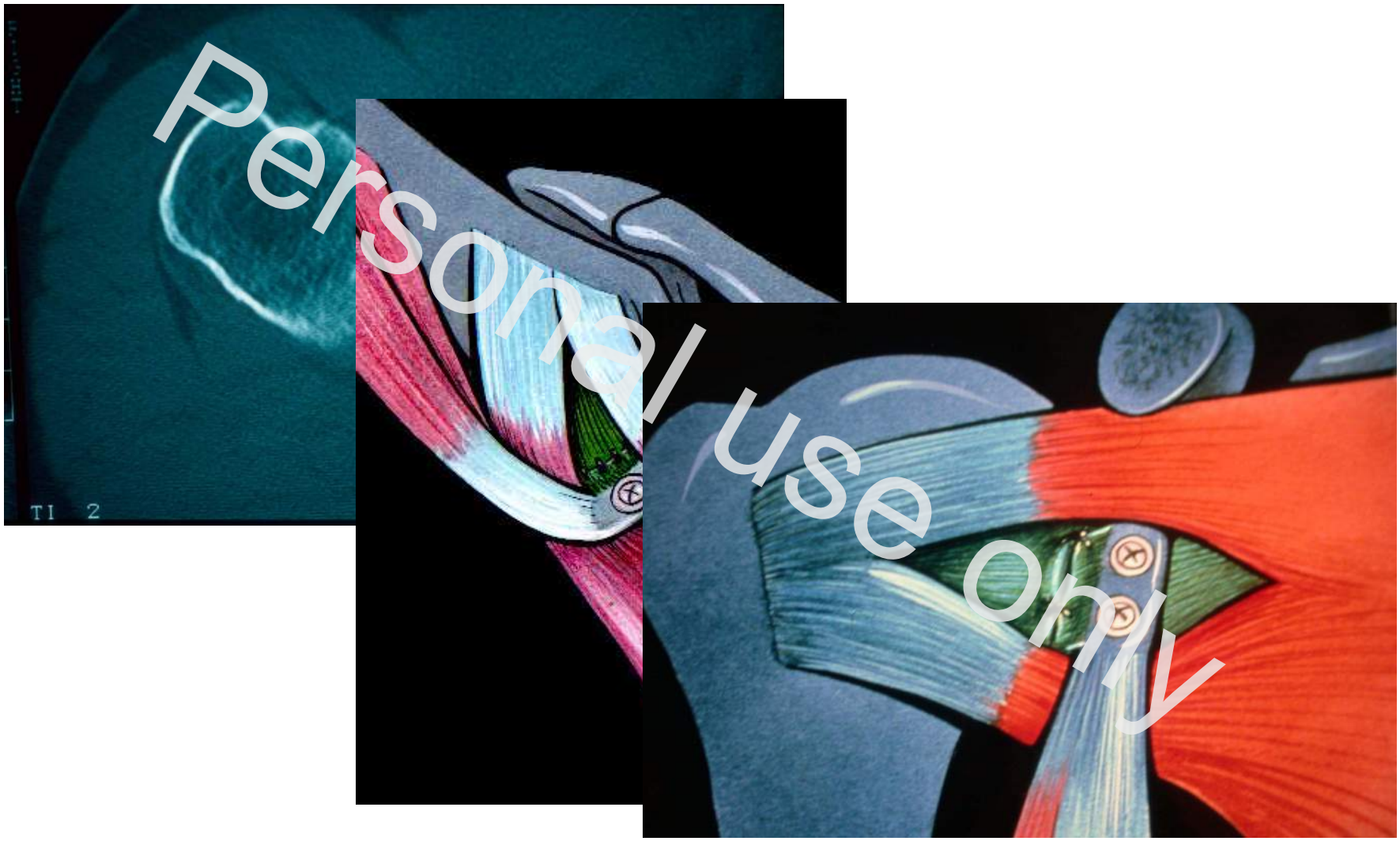




Intervento secondo Latarjet

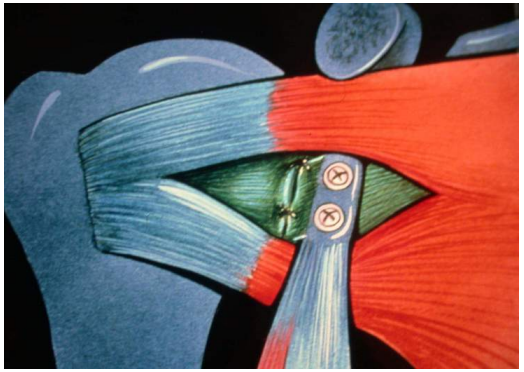


Intervento secondo Latarjet



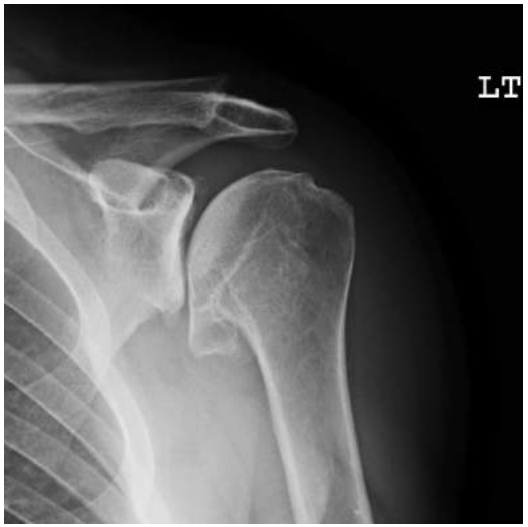
Aftertreatment

Latarjet: results



- Day surgery!
- Complications < 1%
- Recurrence 1-2 %
- Fast recovery

Results: Long term



Indipendent of the treatment

Radiological sign of arthritis: 50 %!!!

When do we operate?

First dislocation (principle suture not to reconstruct)

- Man < 30 anni
- Women < 20 anni
- Cuff tears

Recurrent dislocation

How do we operate?

Discussion with patient: 2 options

Arthroscopic stabilisation

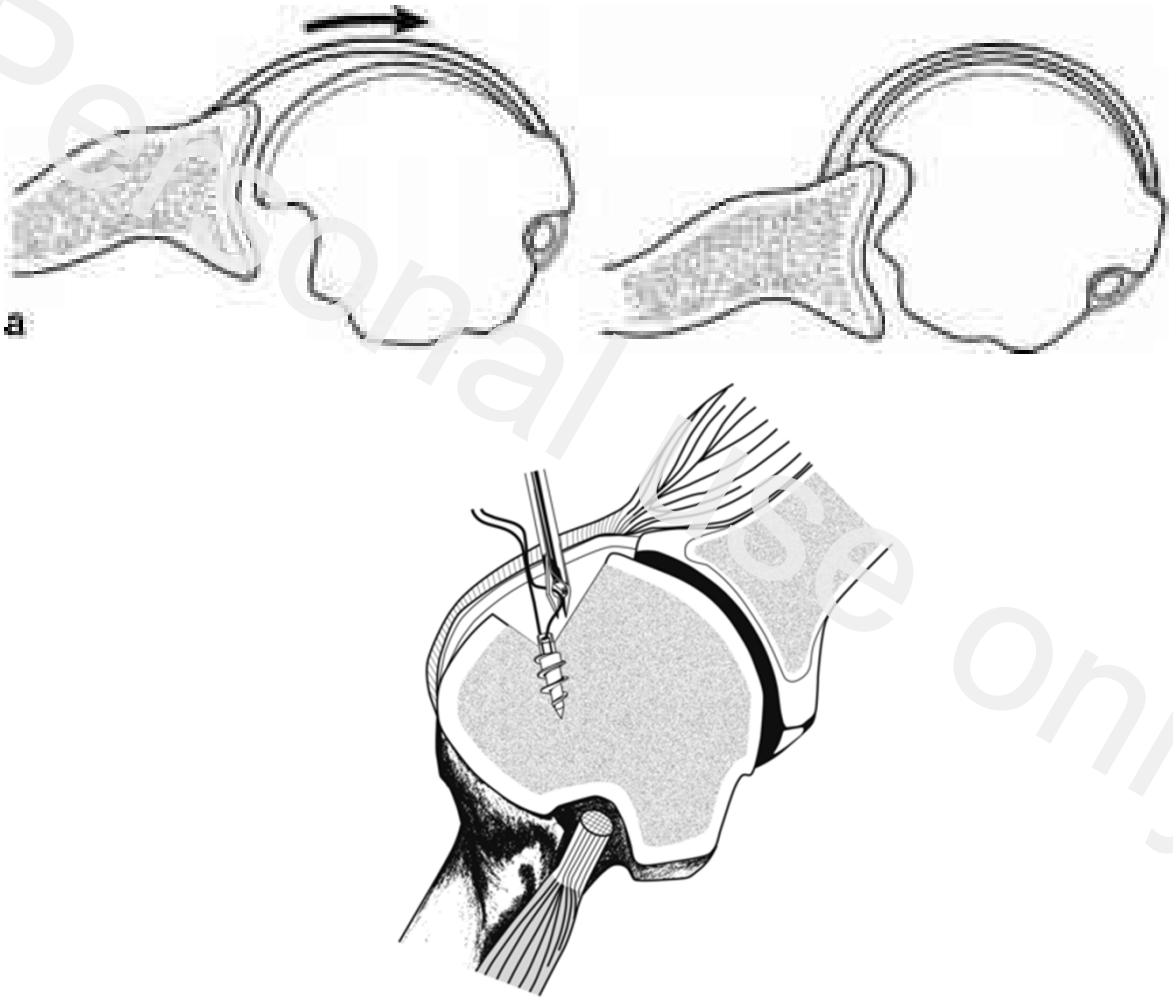
- Low activity
- No bony lesion
- No displasia
- Young

How do we operate?

Latarjet

- All others
- Bony lesion (even if very young)
- Displasia
- Revision after arthroscopic anterior stabilisation

(Reversed) Engaging Hills Sachs



What do we want to know from radiologists?

Acut and in Chronic

- HAGL
- Cuff
- Hill Sachs
- Capsulo-labral complex……extension, retraction
- *Bony Bankart lesion*
- SLAP

Take home messages

- 2 surgical options:
  - Arthroscopic stabilisation
  - Latarjet procedure

- Bony lesion….. Latarjet

Lugano by night

Thanks