18TH COURSE IN SHOULDER SURGERY

Balgrist University Hospital

October 4 – 5, 2011

Secret shoulder secrets

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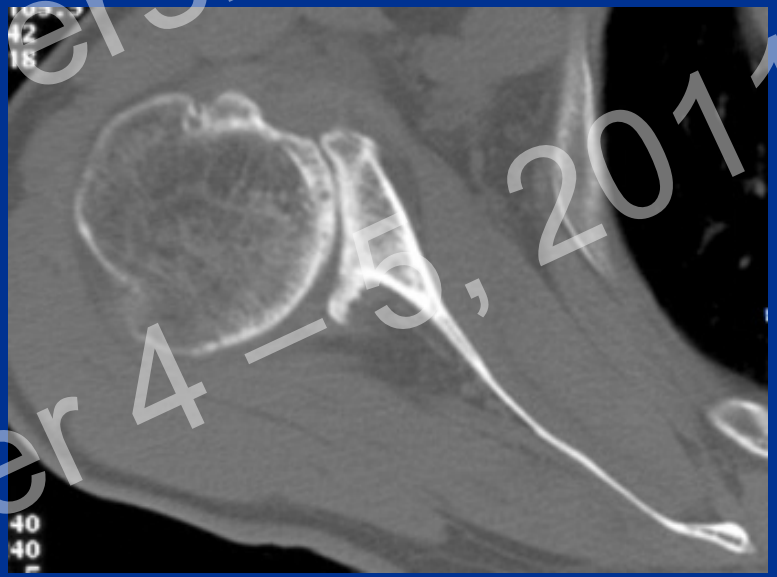
PROTHETIC

Head of the prostheses better too big or too small?

In case of stiffness: smaller (loosening of capsule)

In case of hyperlaxity / instability or strong correction of a glenoid retro/anteversion: bigger (stuffing)

<u>In case of doubt: smaller</u>



PROSTHETIC

Combination head / glenoid:

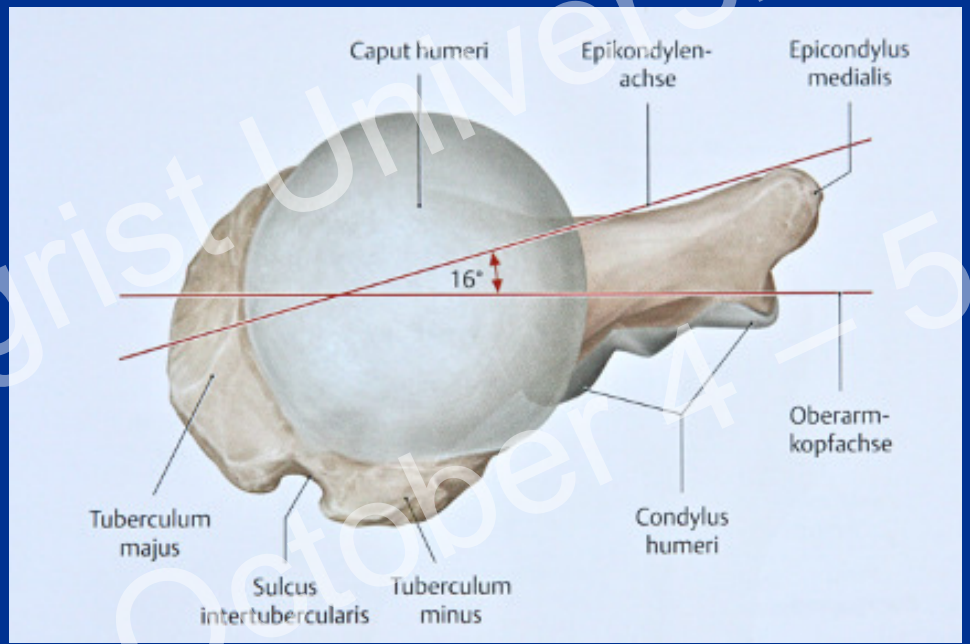
good: **small head / big glenoid**
bad: **big head / small glenoid**

because of loosening of the glenoid

PROSTHETIC

Retrotorsion of the head (i.e. torsion of humerus)?

normal:	**18-25°, 45-74° (average approx 60°)**
Anatomical Prosthesis:	**20°**
Inverse Prosthesis	**approx. 0°**



PROSTHETIC

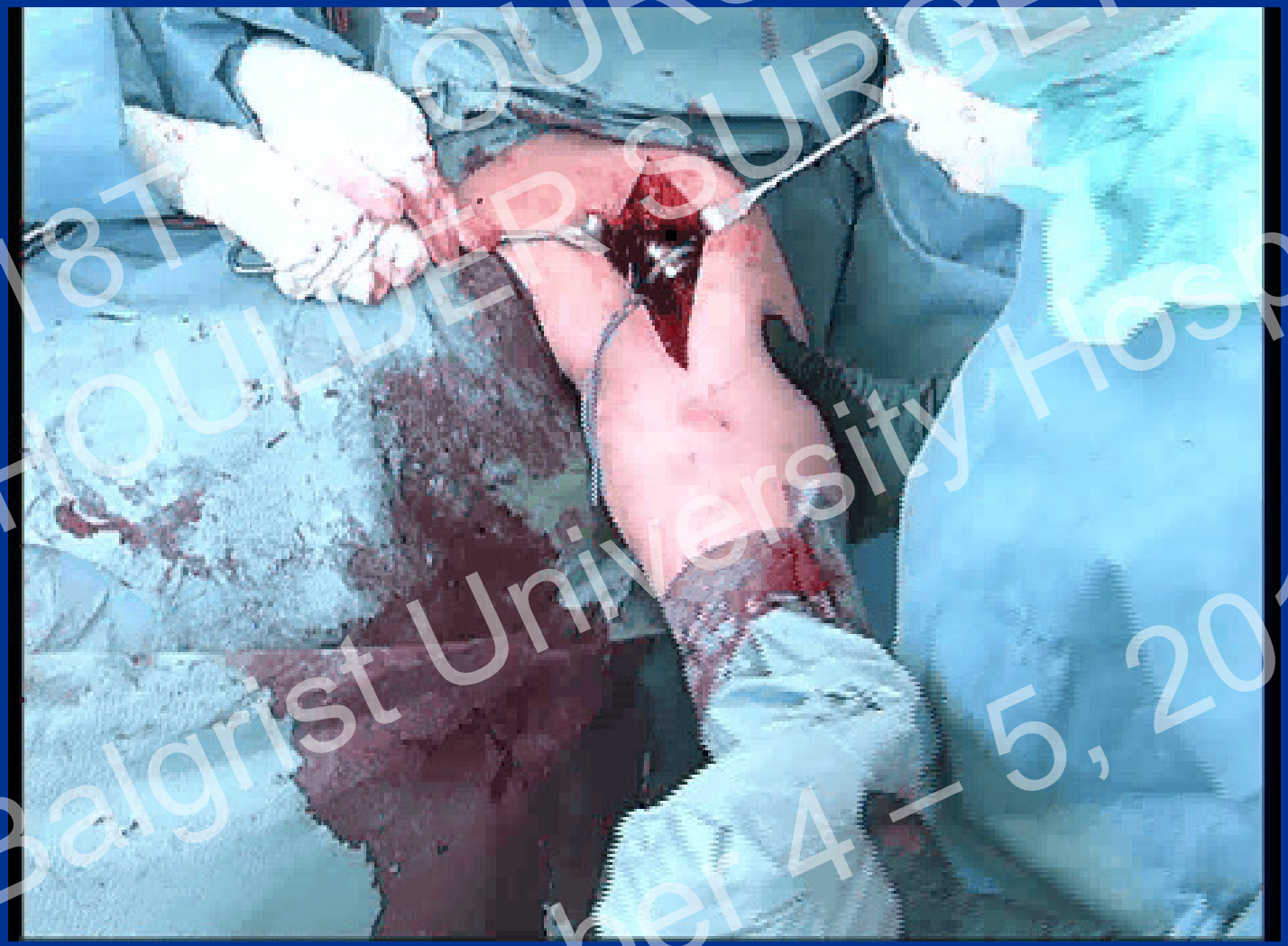
Orientation of inverse prosthesis:

If antetorsion:	**difficult to reduce, posterior impingement**
If retrotorsion:	**risk of dislocation**
Position of dislocation:	**Internal rotation, adduction or abduction**

PROSTHETIC

Flexion movement:

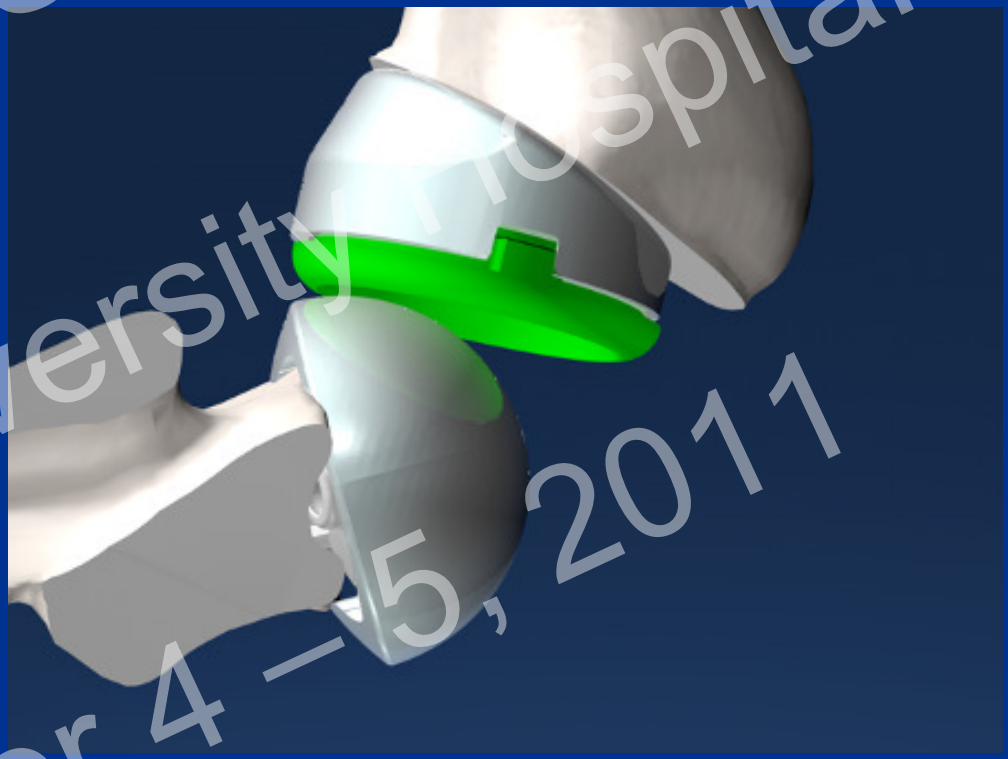
PROSTHETIC



PROSTHETIC

Anteversion glenoid, antetorsion head:

retrotorsion head:



PROSTHETIC

If glenoid in anteversion: antetorsion of the shaft

If glenoid in retroversion: retrotorsion of the shaft

PROSTHETIC

Shaft too long, cannot reduce inverse prosthesis:

1. **Use smalles inlay possible**
2. **Relax patient**
3. **you may consider metaphyseal component with no offset or correct for torsion (if stable)**
4. **If still in trouble:**
   Consider distraction clamp
   (from rotator cuff repair or arthrodesis distractor).
   Danger of later acromion fracture (!)

PROSTHETIC

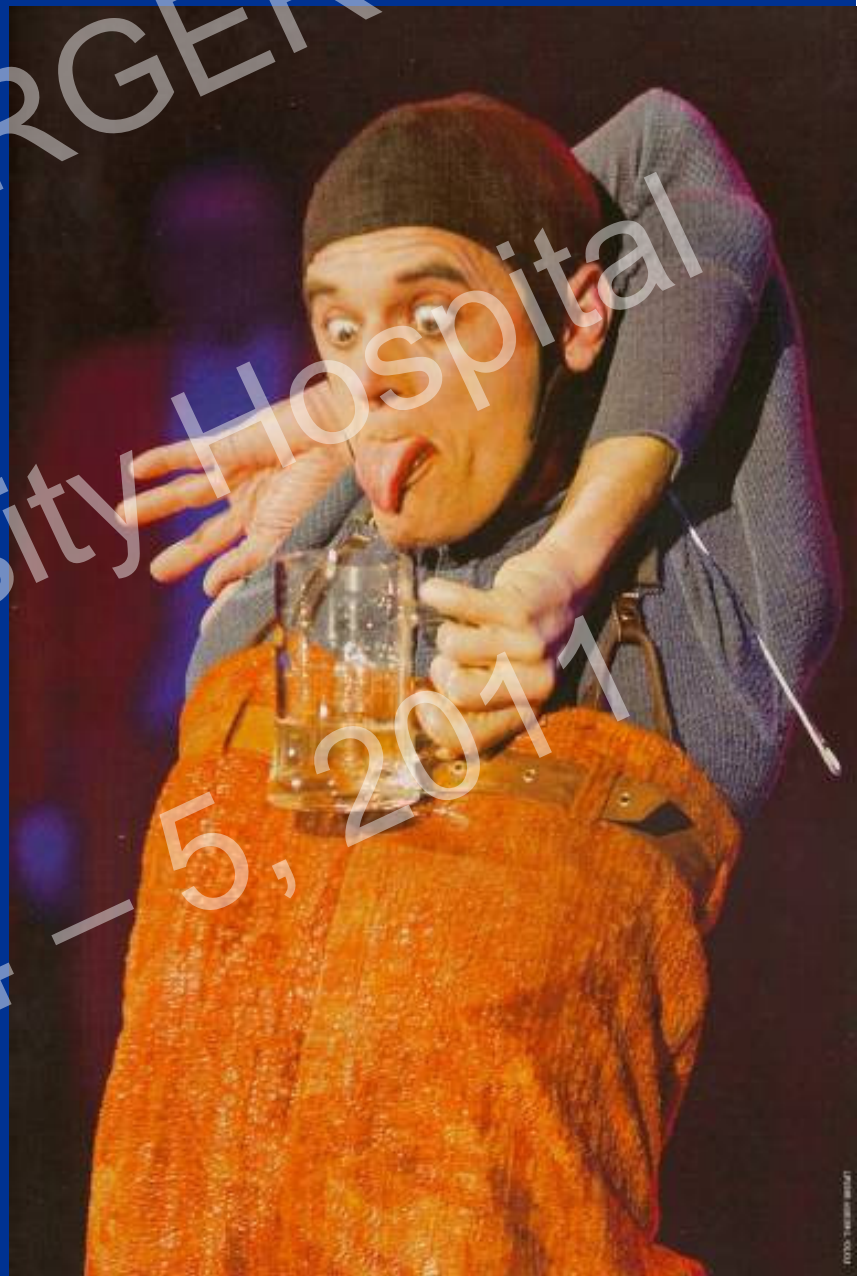
Fix the subscapularis?

INSTABILITY

If there is an unstable hyperlax patient:

Do not correct laxity, only the defect causing instability

Otherwise, you may create osteoarthritis



INSTABILITY

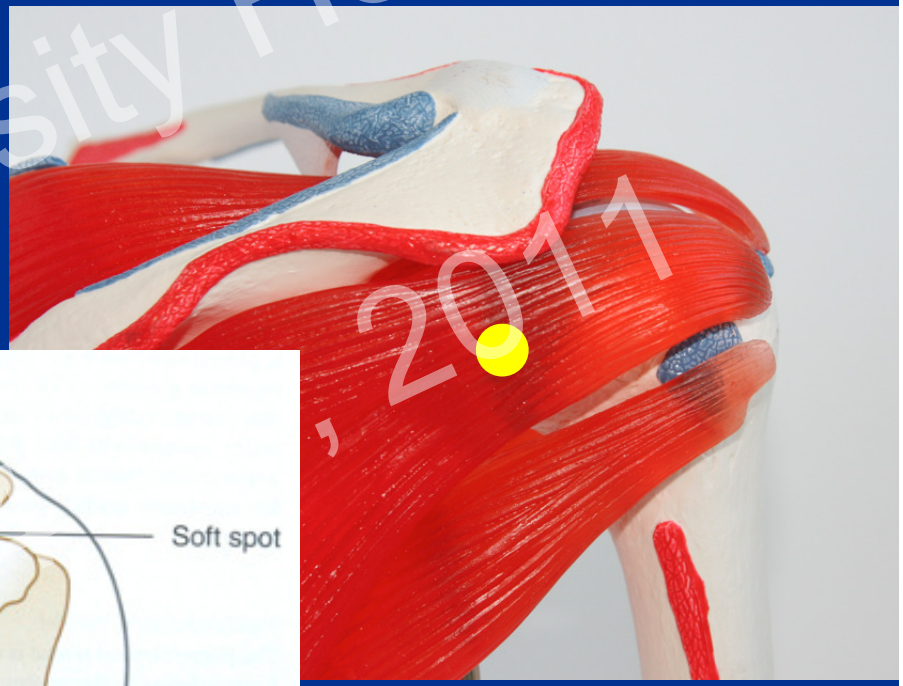
Stabilization:
open versus arthroscopic
bony versus soft tissue

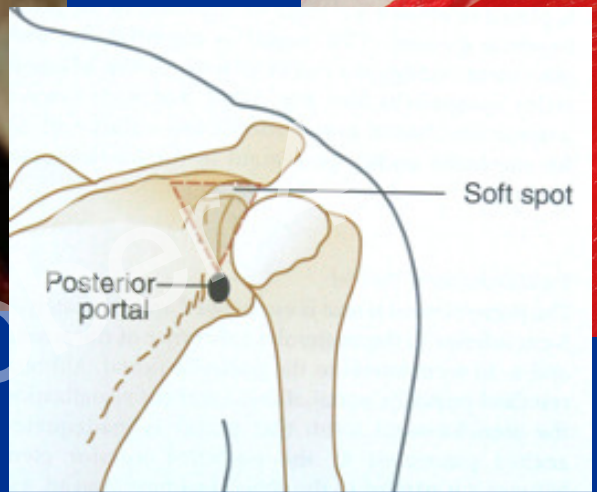
-> repair the pathology
In case of doubt: bony more reliable than soft tissue

ARTHROSCOPY

Portals:
posterior:
„soft spot“ 2cm medial, 2cm inferior:
Can be easier in IR, more medial, better piercing of muscle.

look for the acromion and feel the head





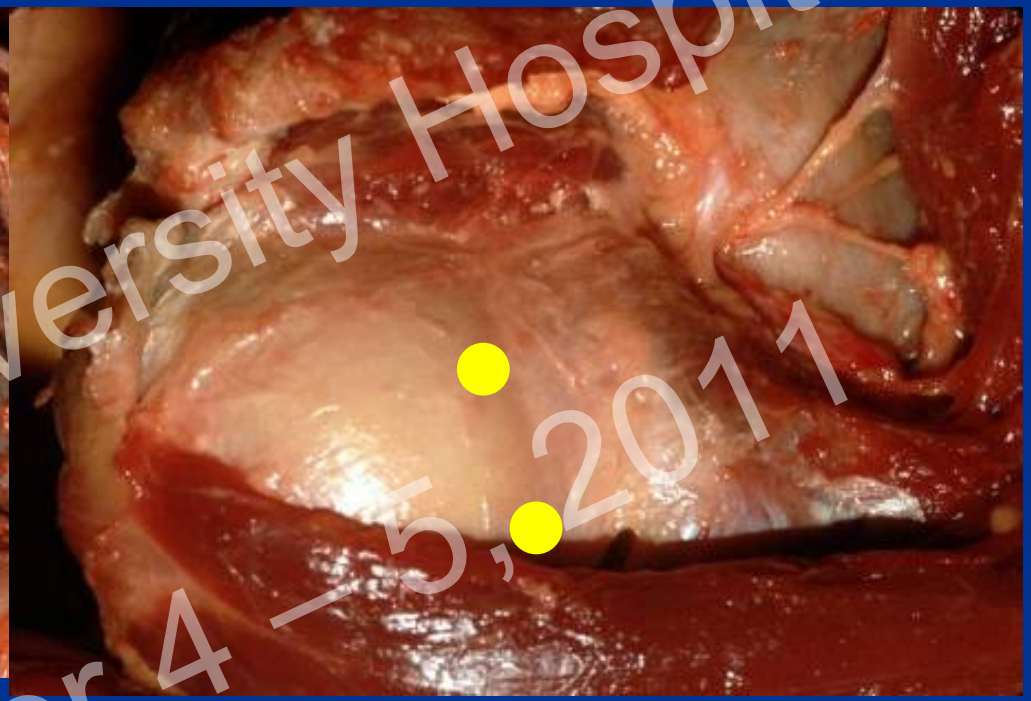
ARTHROSCOPY

2cm medial, 2cm inferior of acromion

more lateral:
problems with posterior cuff, problem to pierce the cuff, less mobility
but: better for subacromial, easier to find the bursa

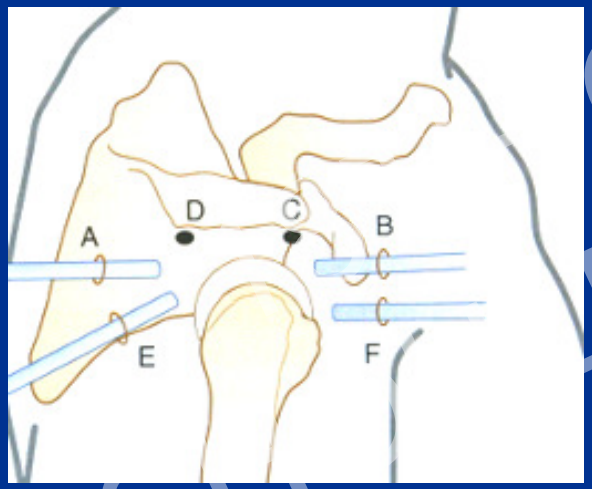
ARTHROSCOPY

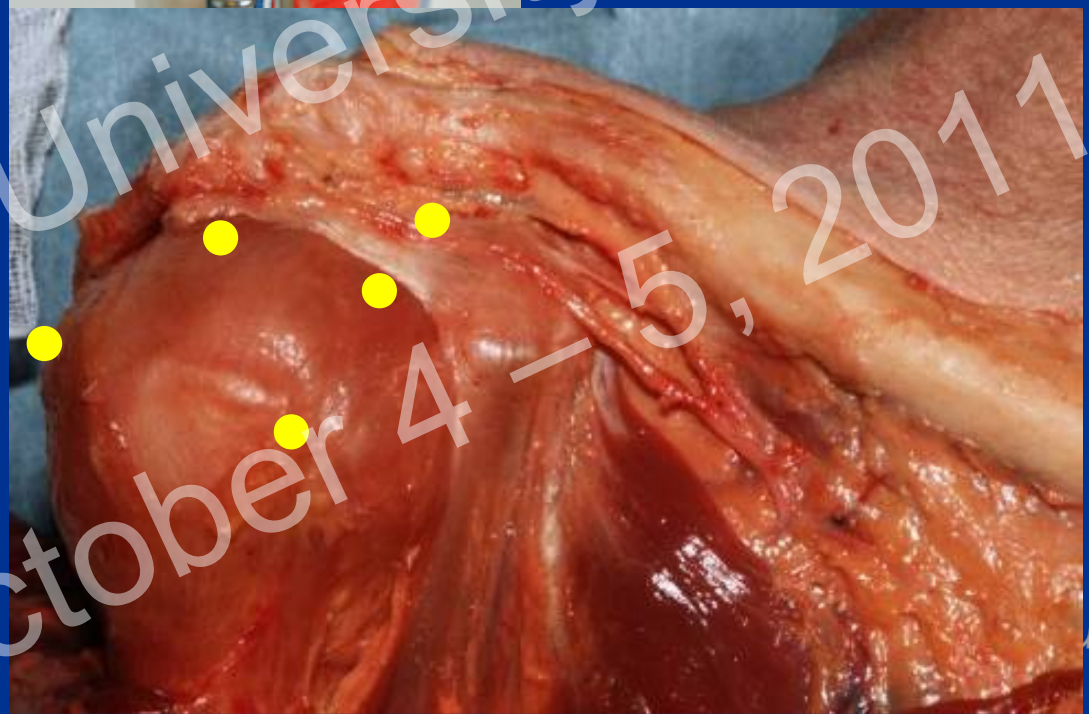
Where is it safe to place the posterior portal?



ARTHROSCOPY

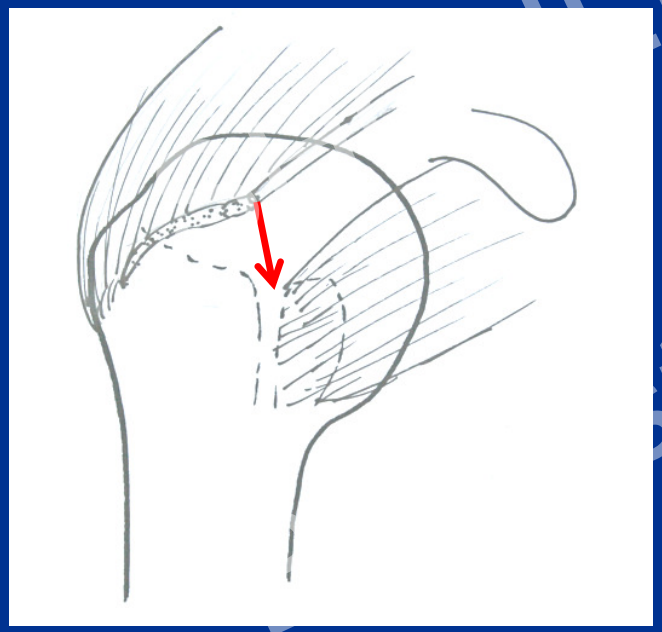
Portals anterior and lateral:

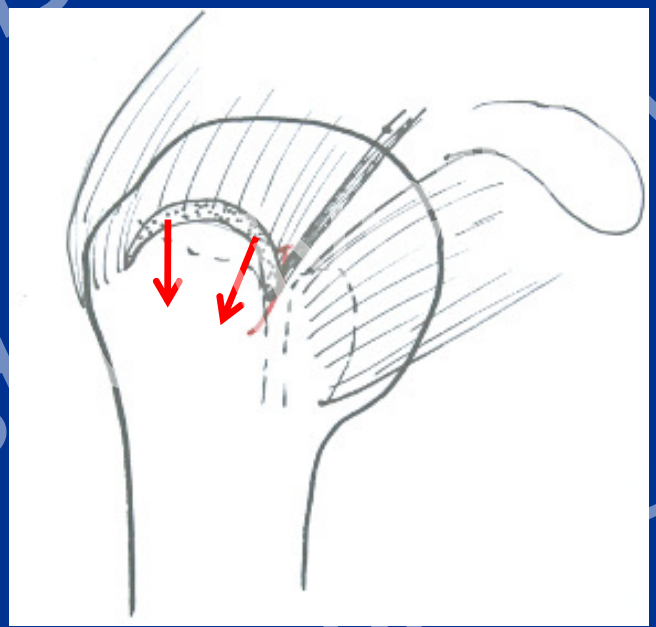


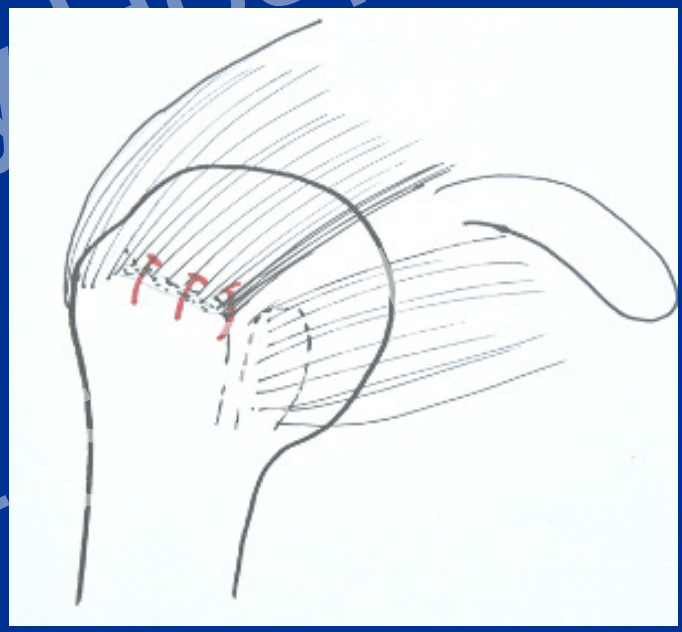


CUFF REPAIR

First repair side to side (close buttonhole)
then
repair tendon to bone

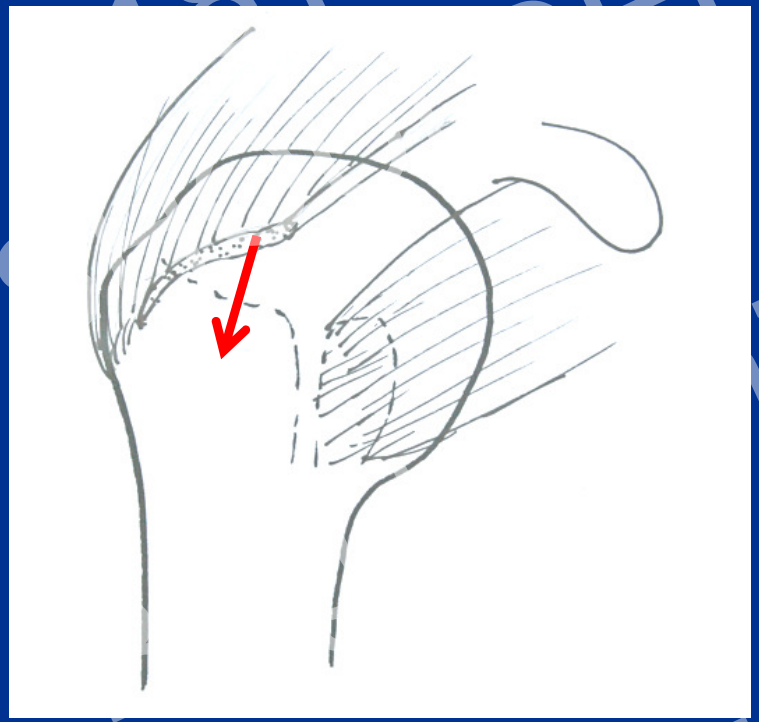


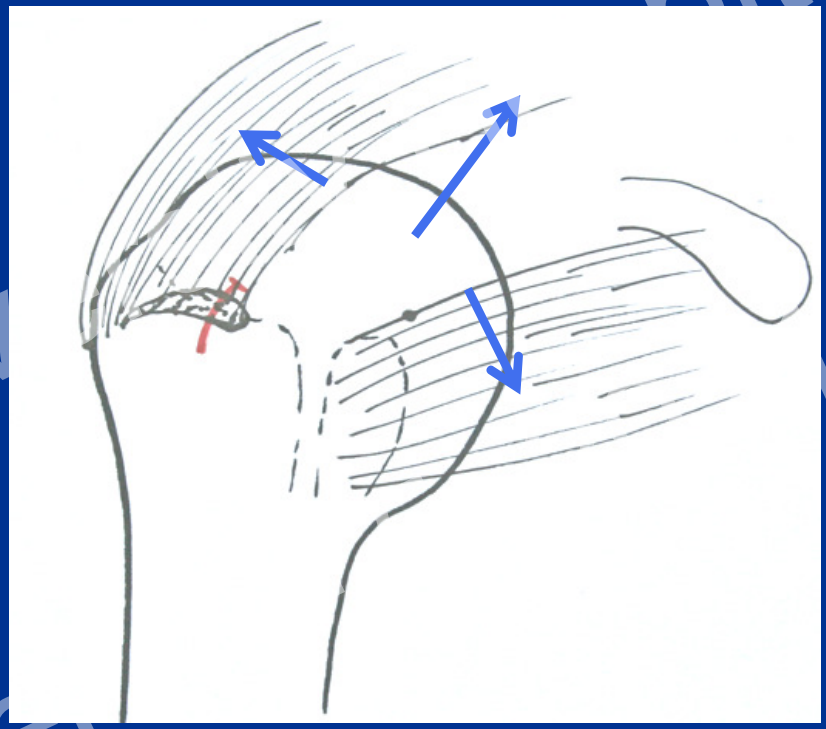




CUFF REPAIR

If closing the interval is not possible, partial repair may be an option, but there is a risk that the head pushes through the buttonhole





CUFF REPAIR

If you cannot bring the cuff to the footprint after extensive release:

1. consider debridement
particularly if there was good function

2. consider partial repair
try to bring the posterior to the anterior edge

3. consider augmentation of the cuff
difficult, expensive

4. consider medialization of the cuff
maximal 1.5cm

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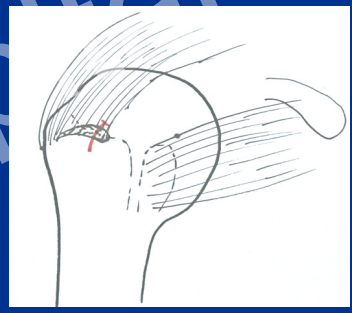

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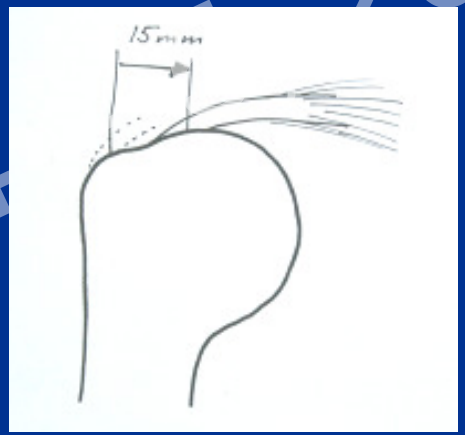


CUFF REPAIR

Pseudoparalysis is treated with rotator cuff repair

but

Pseudoparalysis is a contraindication for rotator cuff repair

???

CUFF REPAIR

1. Painful pseudoparalysis?
If yes, inject with 10cc Lidocain and see. Exclude stiffness.

2. When painfree:
Bad for cuff repair:

- Dynamic anterosuperior subluxation
- Cranialization <7mm
- Patient cannot hold the arm at 90° Abduction.
- **Chronic situation**

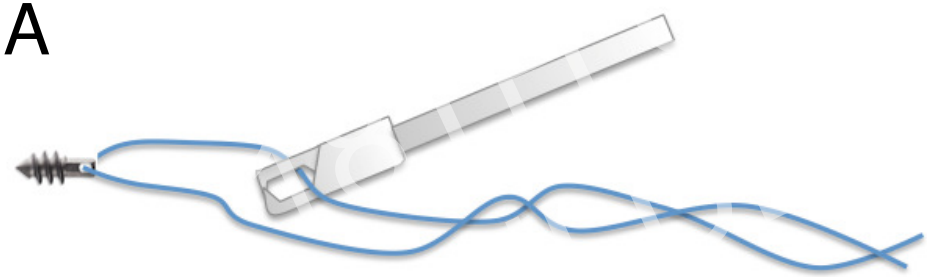
Good cuff for repair:

- Patient can hold the arm in 90° Abduction (moderate)
- Patient can bring the arm to 90° Abduction
- **Acute injury**, previous good function

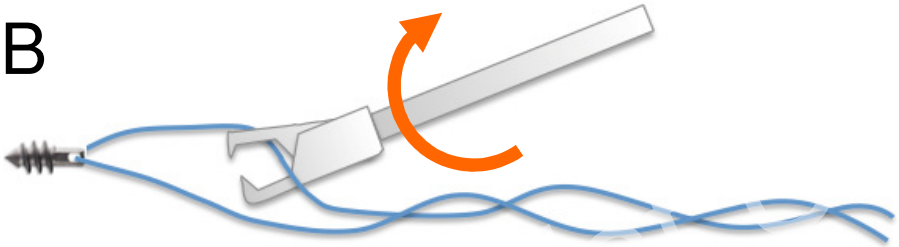
ARTHROSCOPY

untangling of sutures:

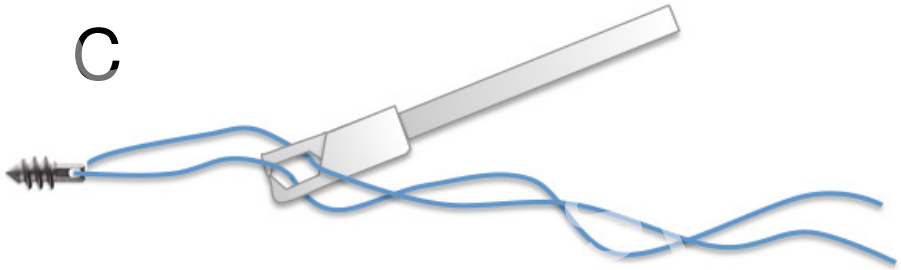
A



B



C



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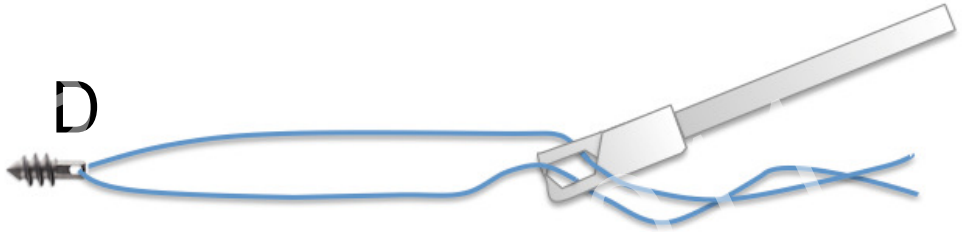

ARTHROSCOPY

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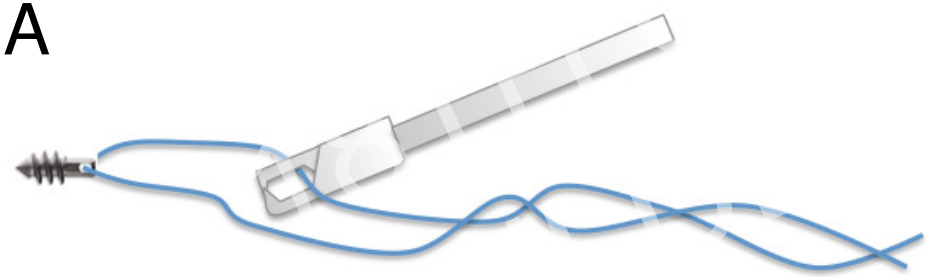

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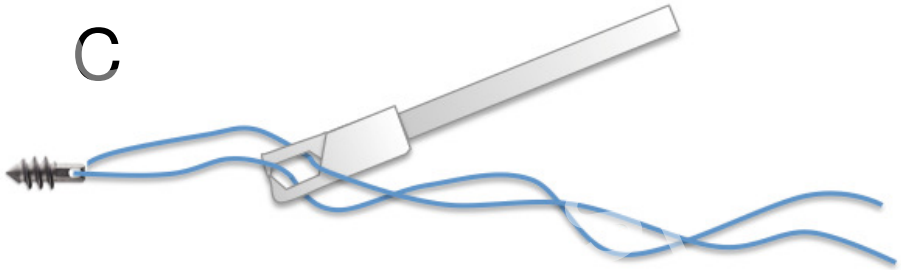
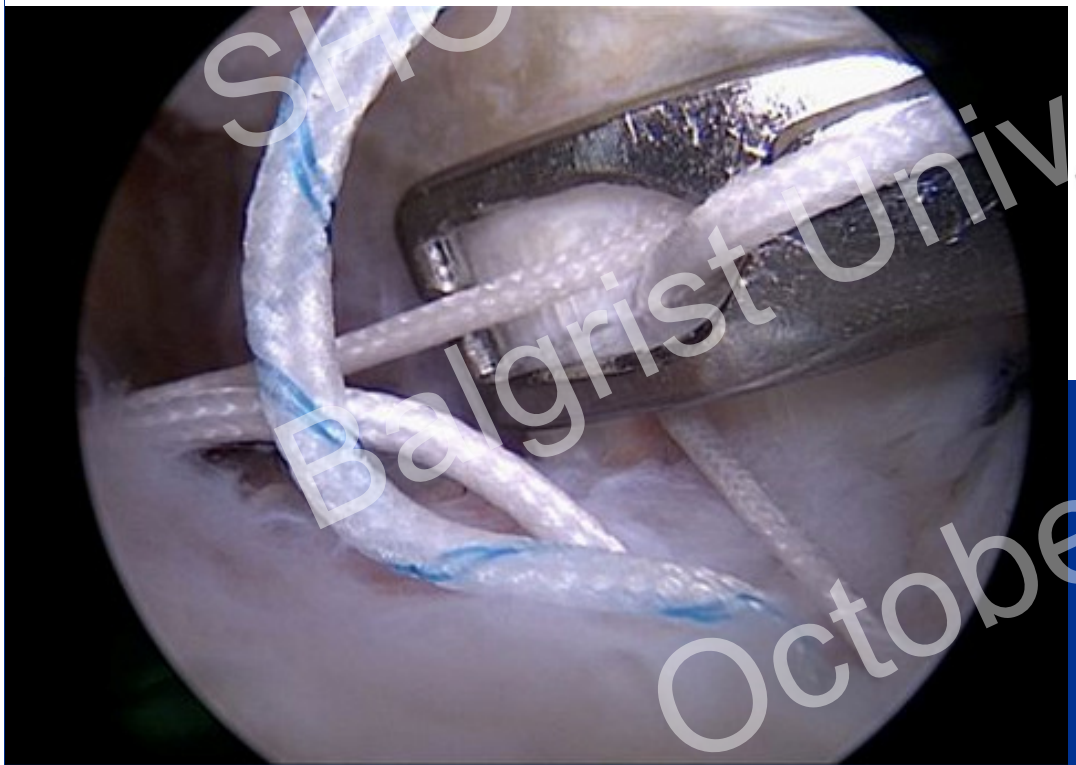
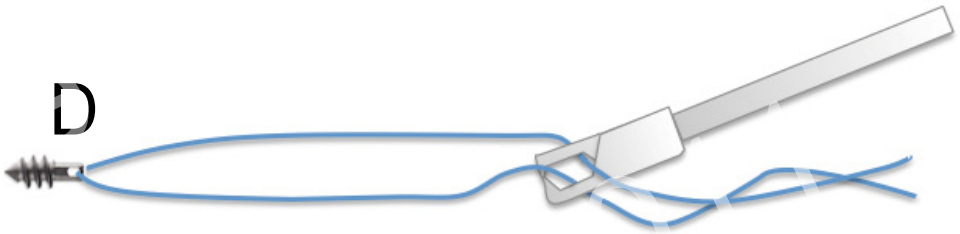


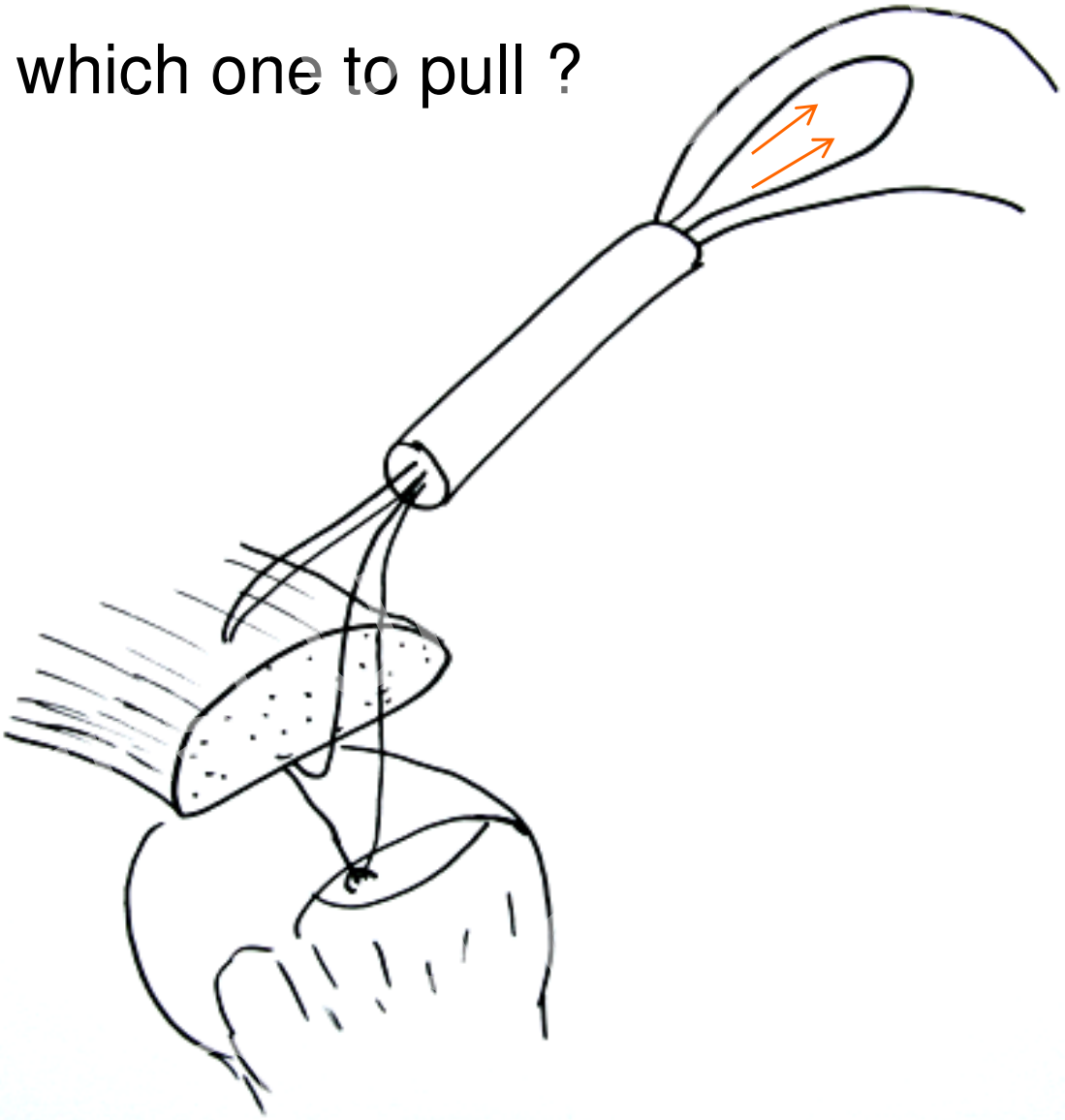


D



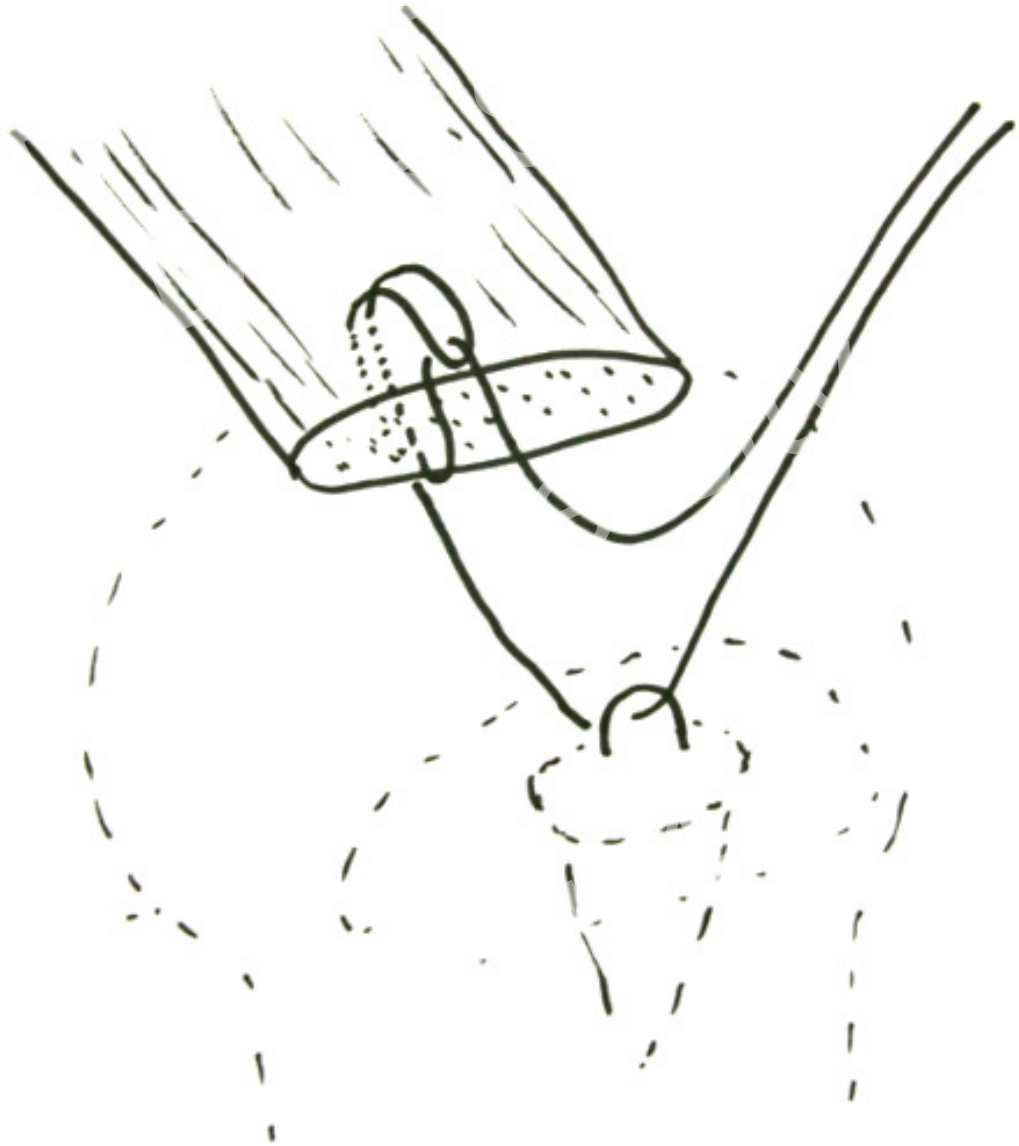
ARTHROSCOPY

on which one to pull ?



ARTHROSCOPY

which one as post ? mobile vs non-mobile suture

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