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诚挚地欢迎中华医学会骨科学分会主席田伟教授  
以及其他来自中国的骨科同仁们参加第90届法国骨科年会  
这是我们有史以来首次迎接来自中国的同道  
感谢所有合作协会及各分会对迎接中国同道所做出的努力

Le président du CNP-SOFCOT (Gilles WALCH) et le président de l'Académie des Orthopédistes et Traumatologues (Henry COUDANE) souhaitent la bienvenue au Pr Wei TIAN, Président du COA (Chinese Orthopaedic Association) ainsi qu'à tous ses collègues chirurgiens orthopédistes de la République Populaire de Chine qui est pour la première fois nation invitée dans l'histoire de la SOFCOT pour ce 90<sup>e</sup> Congrès. Les Présidents du CNP-SOFCOT et de l'AOT remercient les Sociétés Partenaires et Associées de la SOFCOT d'avoir facilité l'accueil de nos Collègues Chinois.

# SOFCOT

SOCIÉTÉ Française de Chirurgie Orthopédique et Traumatologique

PARIS - PALAIS DES CONGRÈS

9-12 NOVEMBRE 2015



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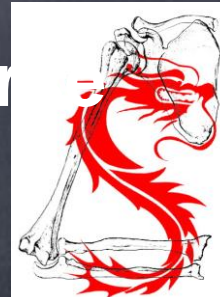




# CSES - Chinese Shoulder & Elbow Society

- Members in 2014: 105
- Congress meeting: Biennially
- Cooperations & Communications:

ASES traveling fellowship, NSC, Annecy course



C.S.E.S

Chinese Shoulder and Elbow Society



中华医学会系列杂志

ISSN 2095-5790  
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# 中华肩肘外科电子杂志

ZHONGHUA JIANZHOU WAIKE DIANZI ZAZHI

2013年11月 第1卷 第1期（创刊号）

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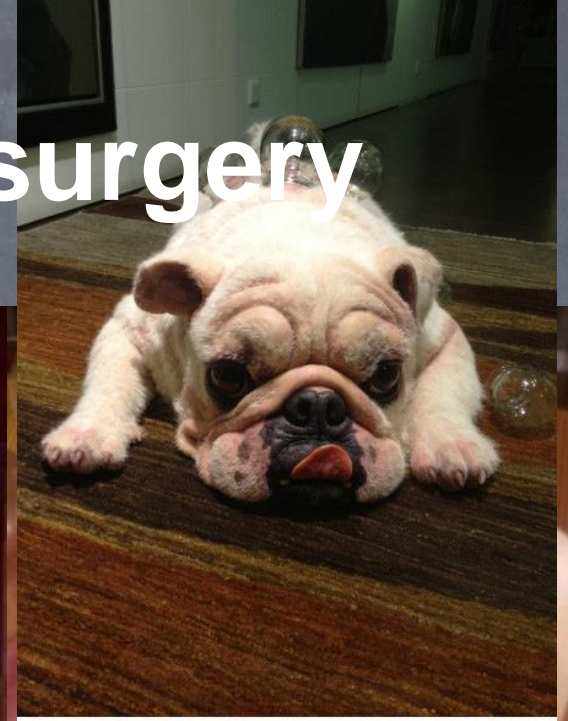
中华医学会

# Shoulder in China

- Surgeons: trauma guys and sports guys
- Patients: RCT, instability, trauma
- Pathology: very few primary OA
- Something unique: patients avoid surgeries



# Chinese do NOT like surgery





# Shoulder in China







Beijing Ji Shui Tan Hospital  
School of Medicine, Peking University



# Shoulder Service

- 2001.7: shoulder fellowship with E Flatow
- 2002.2: small group with subspecialty
- 2004: shoulder service
- 2005: shoulder learning



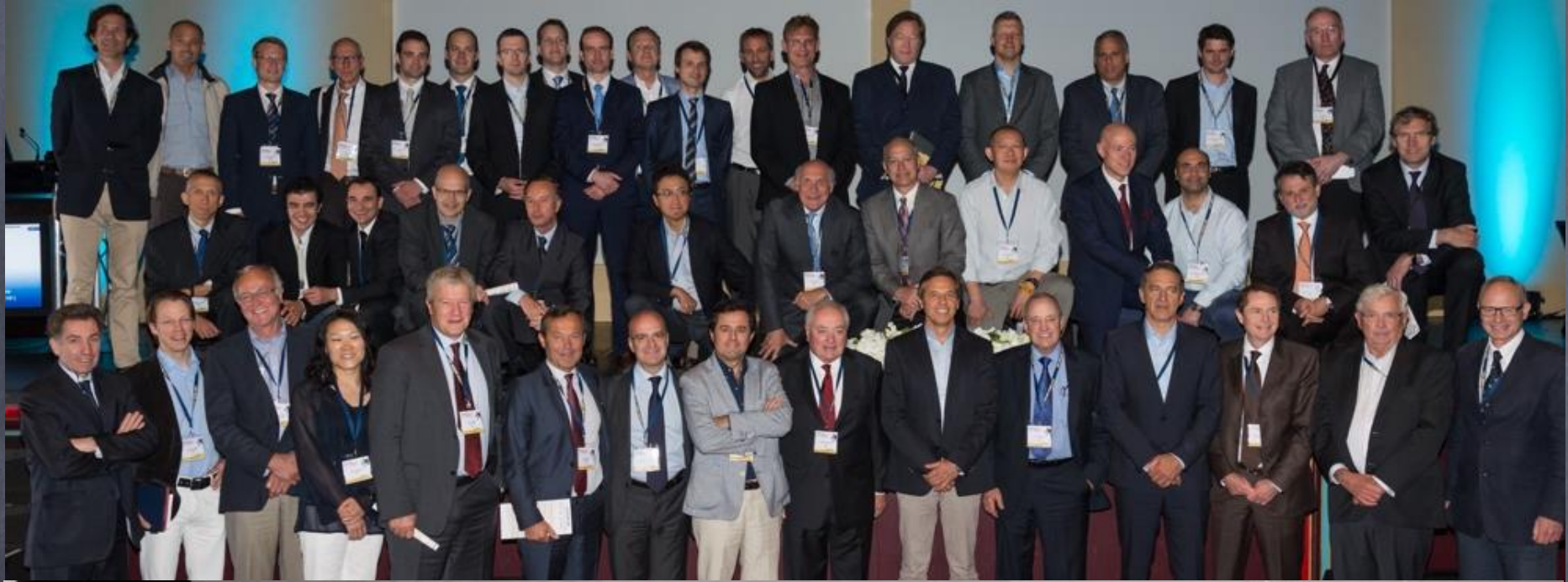
# Shoulder Service

- everything about shoulder
- NO tumors
- 2014: 650 surgeries

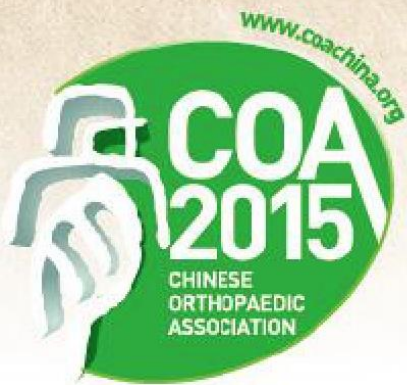


# Shoulder Service

- arthroscopic surgery: 400
- shoulder trauma & OA: 150 - 200
- elbow: 50 - 100







中华医学会第十七届骨科学术会议暨第十届COA国际学术大会

The 10<sup>th</sup> International Congress of  
Chinese Orthopaedic Association



2015年11月19-22日 中国·重庆 November 19-22, 2015 ChongQing, China

- Guest nation: France
  - Philippe Collin
  - Daniel Mole
  - Jean-Francois Kempf
  - Henry Coudane



- French shoulder society: **welcome anytime !**










# Arthroscopic vs. Open Latarjet: Who's the Champion ?

姜春岩 朱以明

Chunyan Jiang MD Ph.D, Yiming Zhu MD

Professor, Shoulder Service

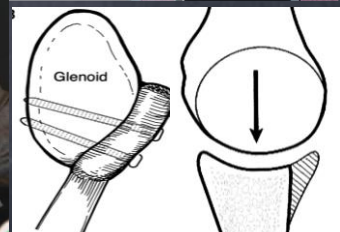
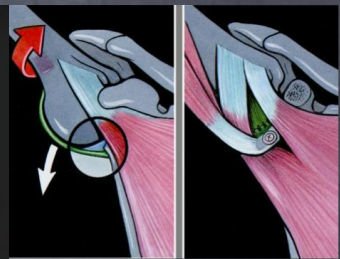
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School of Medicine, Peking University





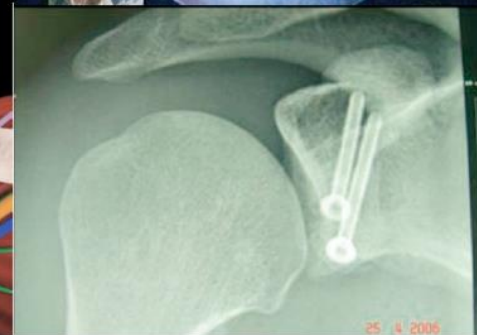
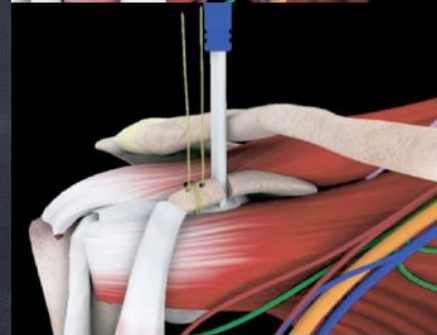
# Latarjet Procedure – “triple blocking”

- Dynamic reinforcement by the conjoined tendon
- Inferior capsular ligamentous complex reinforcement by the stump of the coracoacromial ligament
- Increase glenoid width



# Arthroscopic Latarjet

- Laurent Lafosse





# Purpose

- To evaluate & compare the clinical and radiographic outcomes of anterior shoulder instability patients treated with arthroscopic Latarjet vs open Latarjet regarding graft position, screw orientation, graft resorption & clinical function



# Patients and Methods

Study design: Prospective Comparative study

## • Inclusion criteria

- Traumatic anterior instability
- Glenoid defect  $> 20\%$  &  $< 40\%$  on preop CT en face view
- Treated by open or @ Latarjet
- Patients' agreements
- Complete radiological evaluation (CT-3d at preop, immediate postop & postop 1-y)

## • Exclusion criteria

- MDI
- Concomitant RCT
- Degenerative evidence in G-H
- Neurological deficit
- Incomplete radiological evaluation



# Patients and Methods

- The open Latarjet group
  - initial **47** patients in the series
- The arthroscopic Latarjet group
  - the subsequent **51** patients

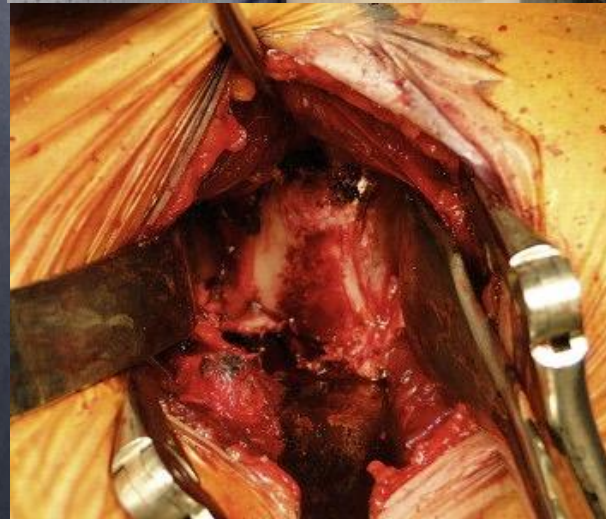
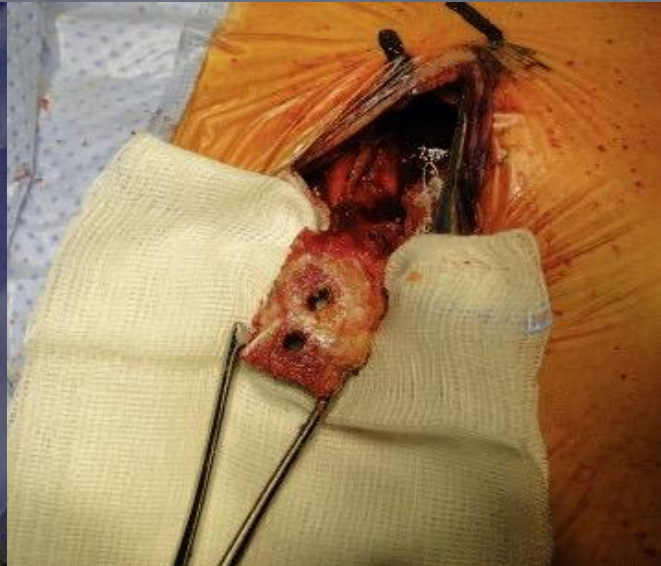


# Surgical technique

- General + inter-scalene block
- Beach-chair position:
  - Open: Walch technique, axillary crease approach
  - @: Modified Lafosse technique
- Two 4.0mm AO cannulated screws
- Concomitant Bankart repair
- Standard rehab



# Open Latarjet Procedure

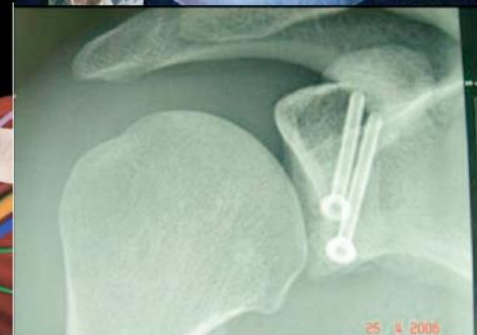
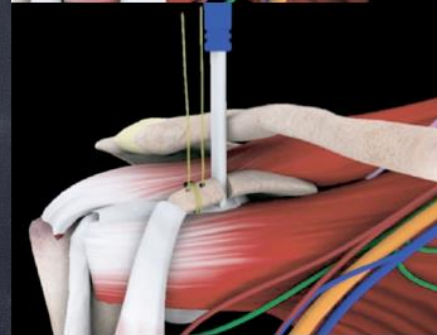
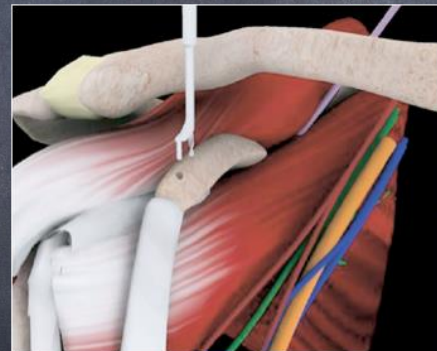




# Arthroscopic Latarjet

- Laurent Lafosse

capsule debridement & massive ablation in subscap





# Major steps

- Antero-inferior capsule prep
- Coracoid graft prep
- Nerve identification
- Glenoid prep
- Subscap split
- Graft fixation + capsule repair





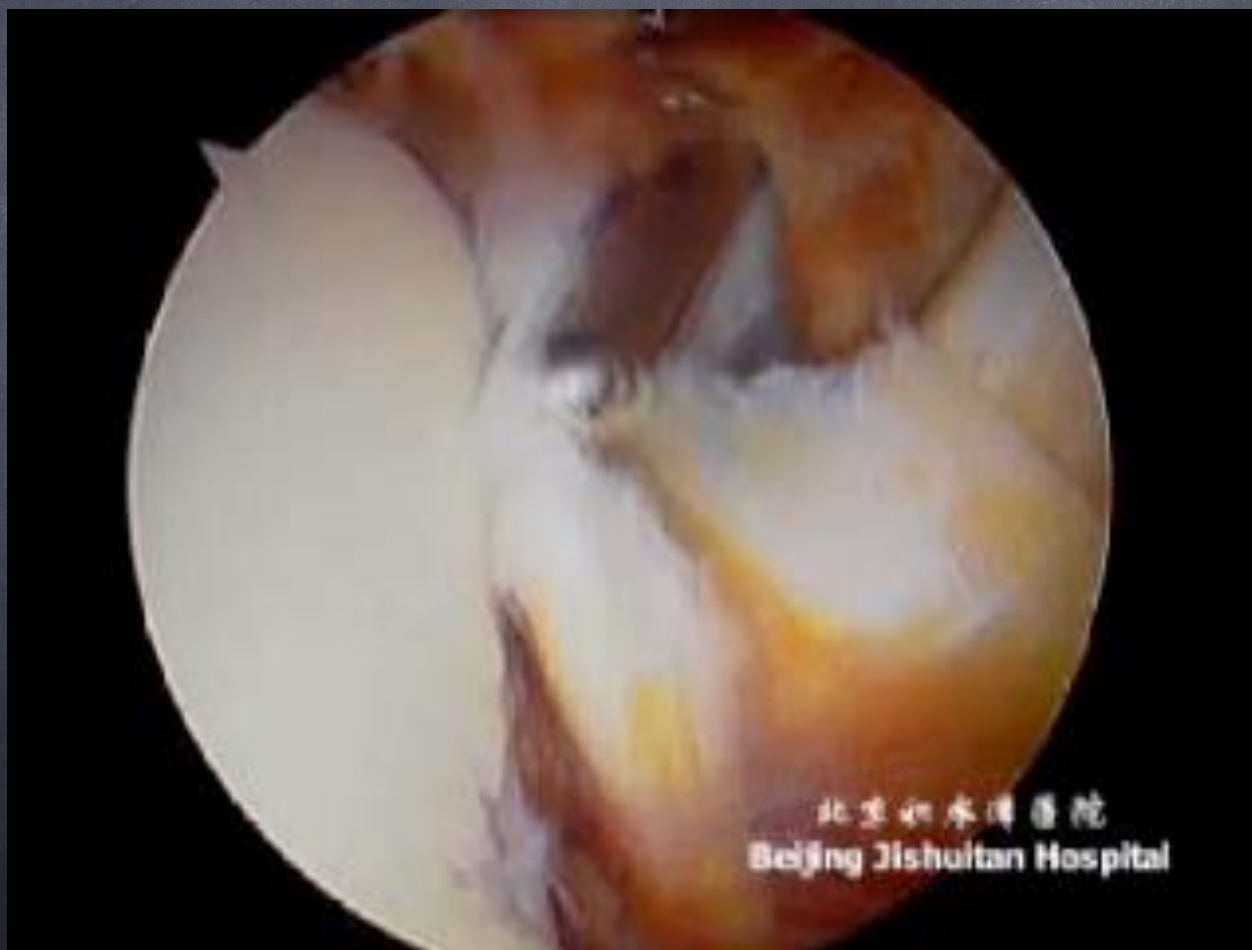
# Major steps

- **Antero-inferior capsule prep**
- Coracoid graft prep
- Nerve identification
- Glenoid prep
- **Subscap split**
- **Graft fixation + capsule repair**

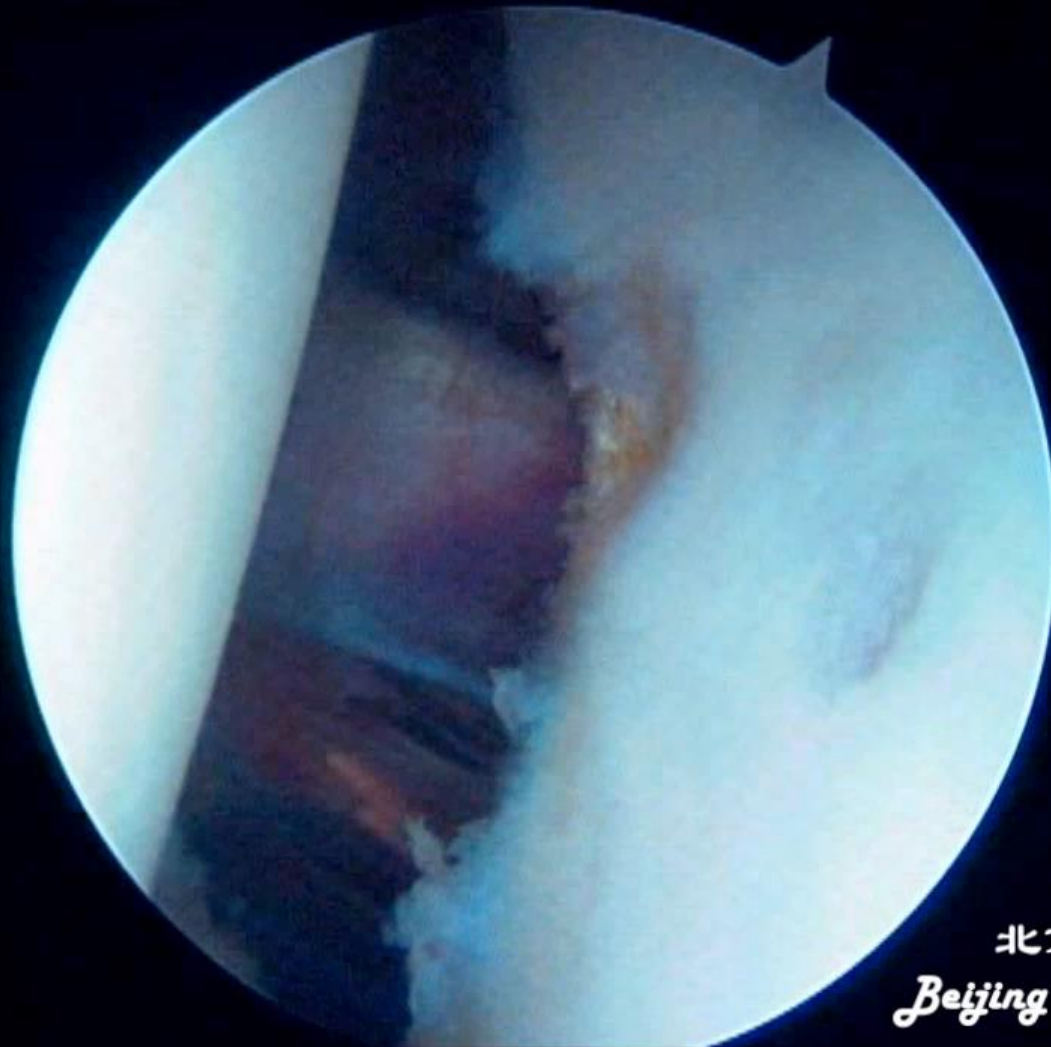




# Antero-inferior Capsule Debridement



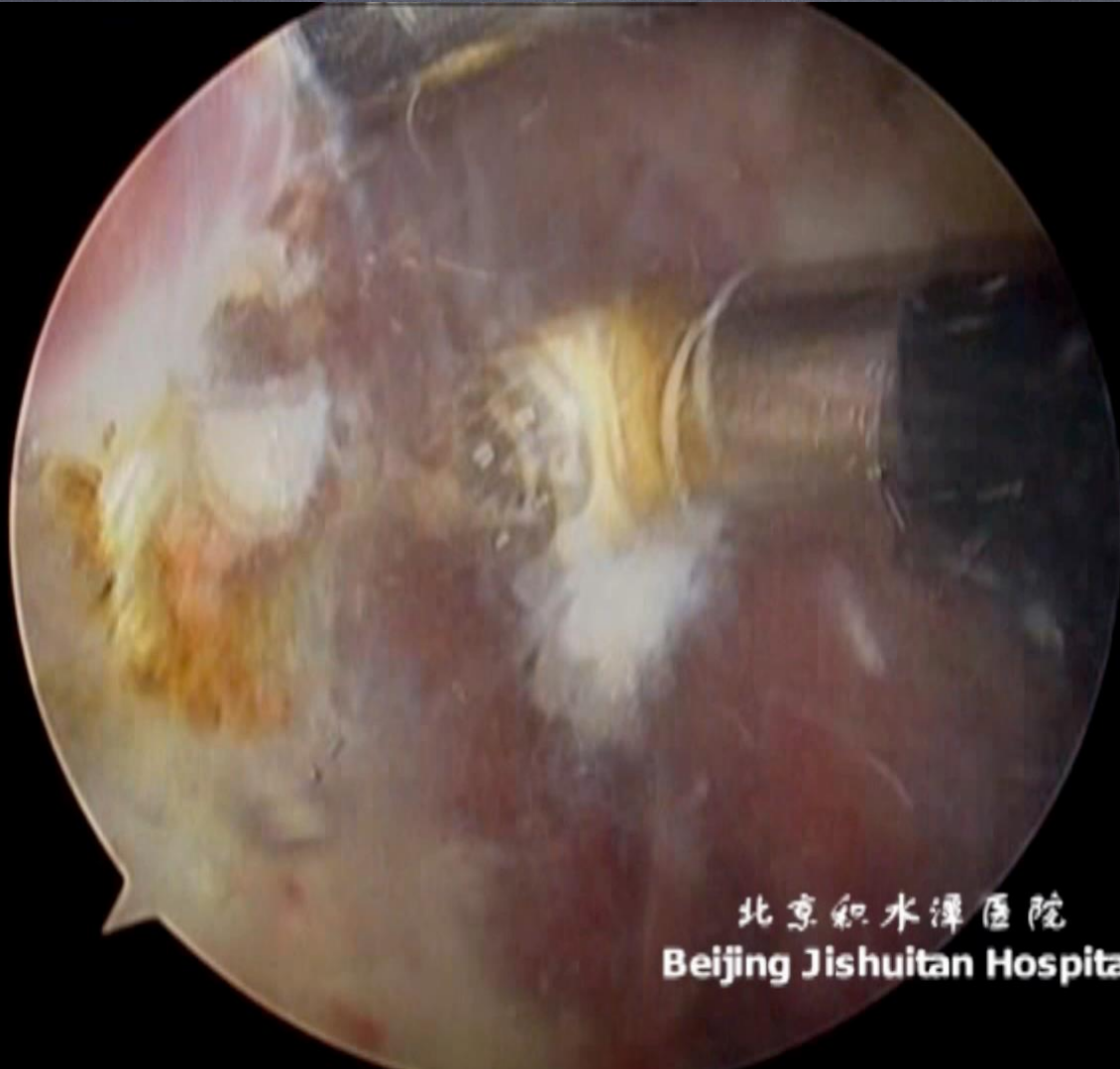
# Antero-inferior Capsule Release





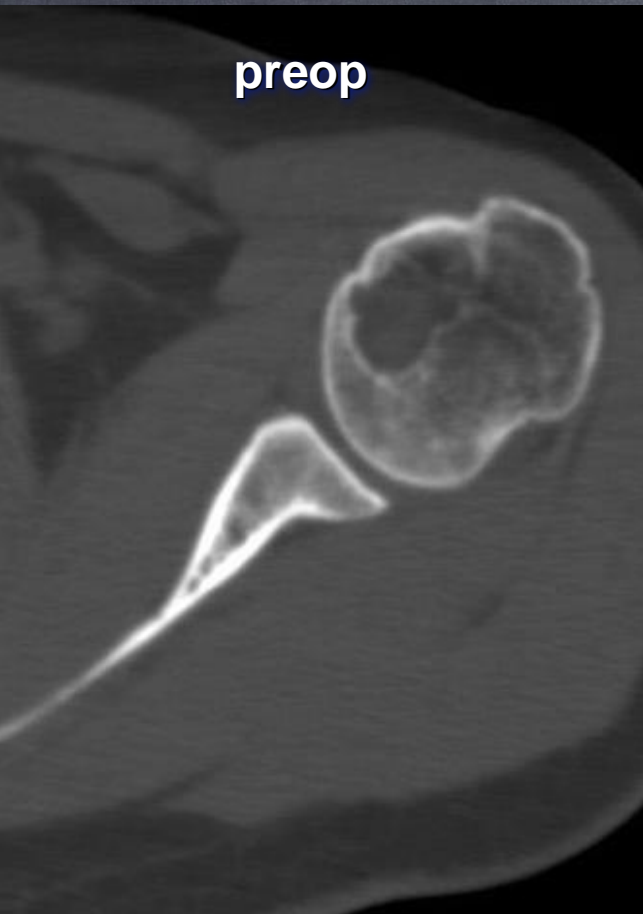
# Subscap split

- with massive ablation in tendinous part

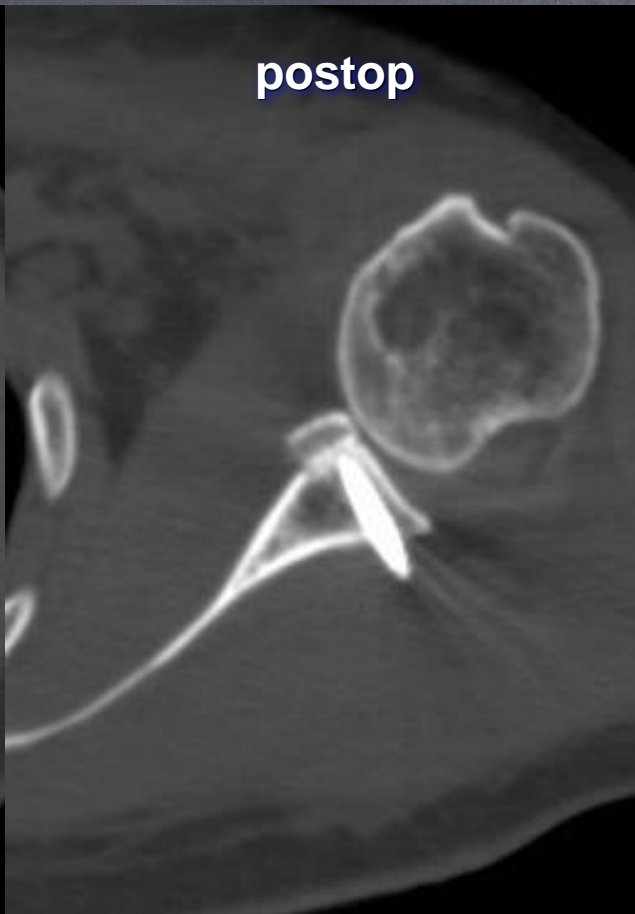


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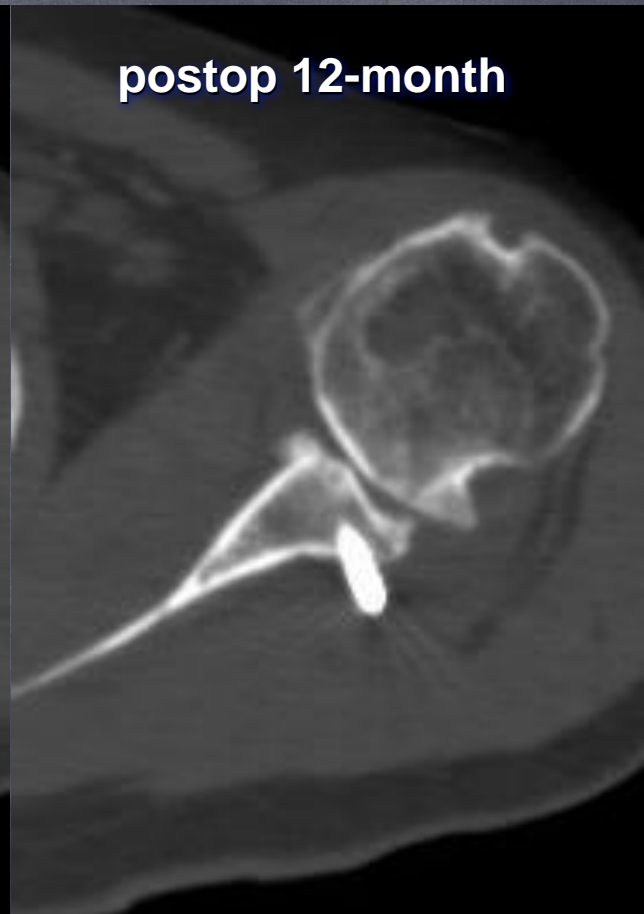
preop



postop

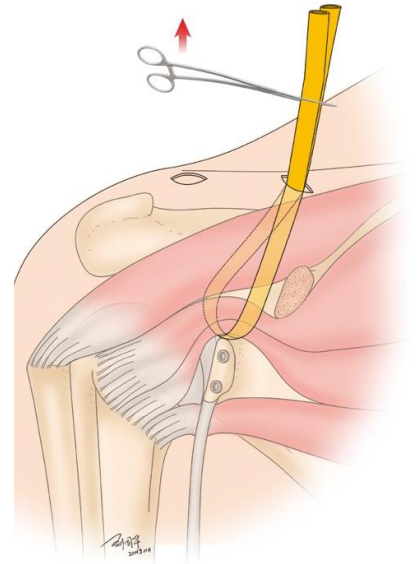
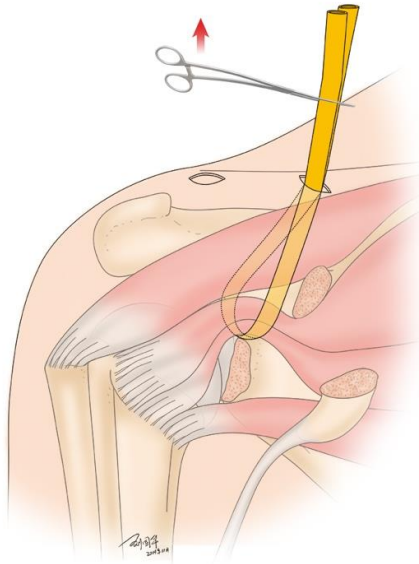
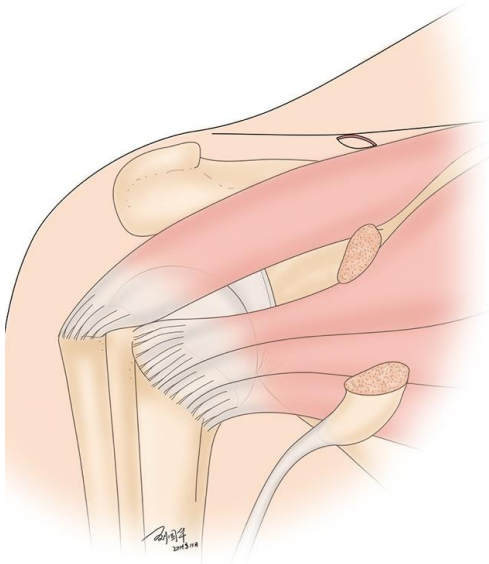
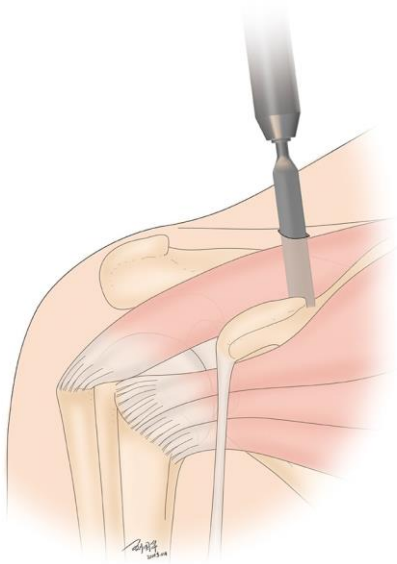


postop 12-month

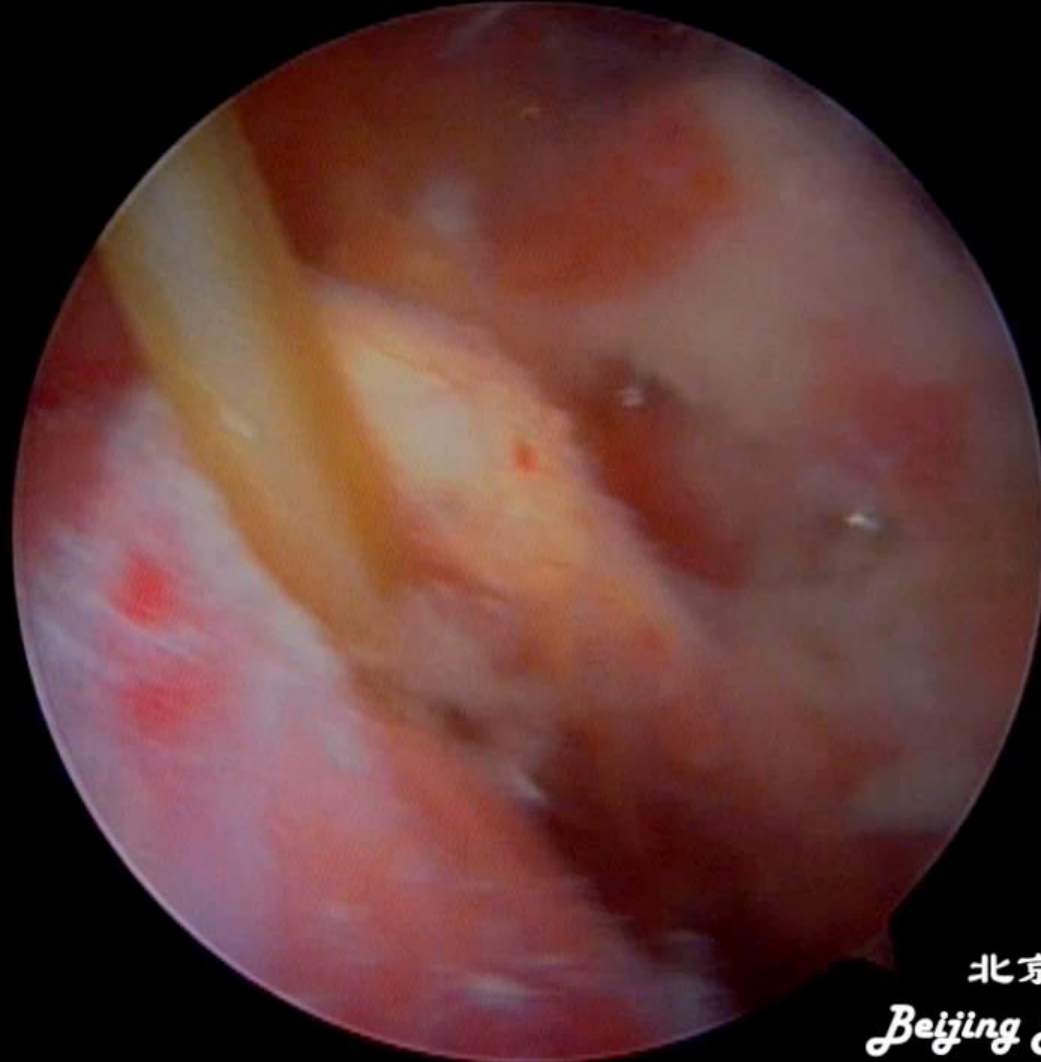




# Subscap split - tendon-muscle junction

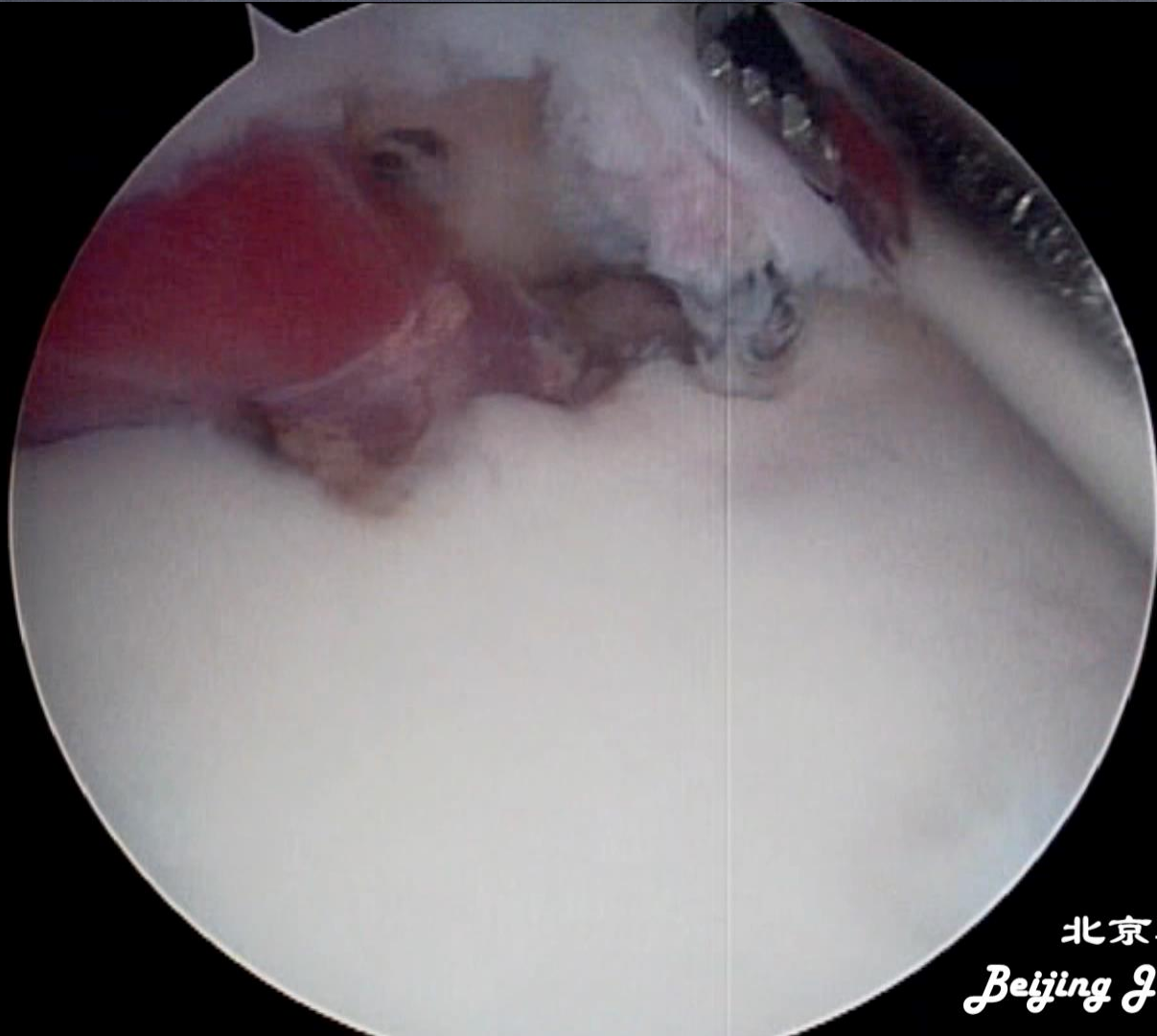


# Subscap split - tendon-muscle junction





# Bankart repair - make graft extra-articular



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*Beijing Jishuitan Hospital*

# Postoperative rehabilitation

- Same for both groups
- Sling for 6 weeks
- Daily activities within FF-90 & ER-10 after 3 weeks
- Strengthening after 3 months
- No contact sport until postop 8-m with healing evidence



# Clinical evaluation

- Follow-up interviews
  - 3-w, 6-w, 3-m, 6-m, 1-y postop & every year
  - ASES, Constant-Murley, Rowe scores

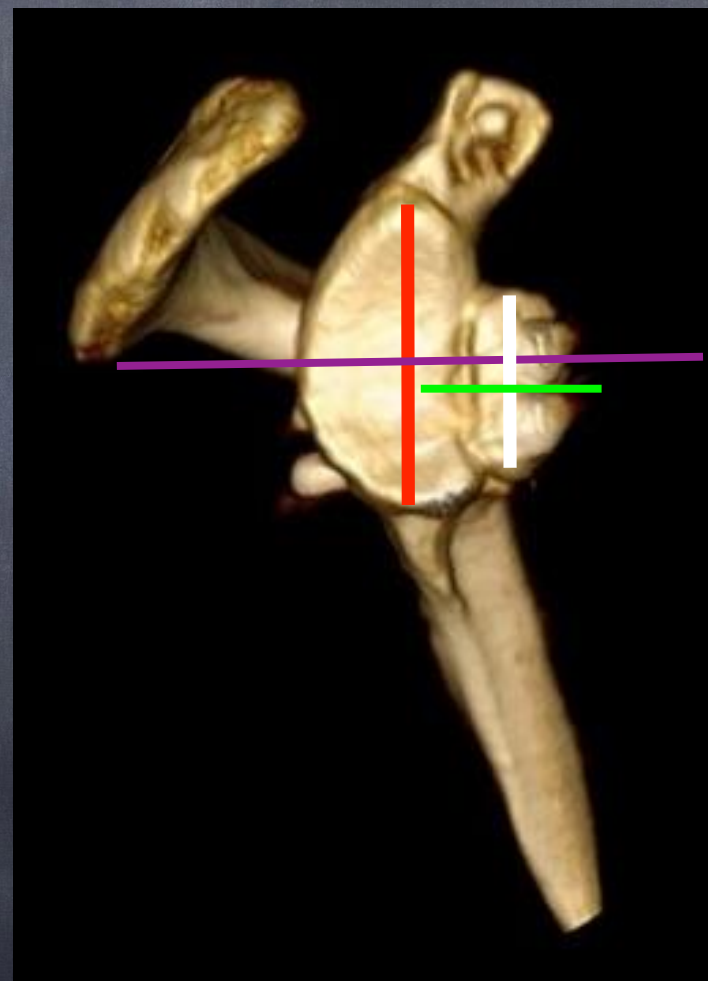
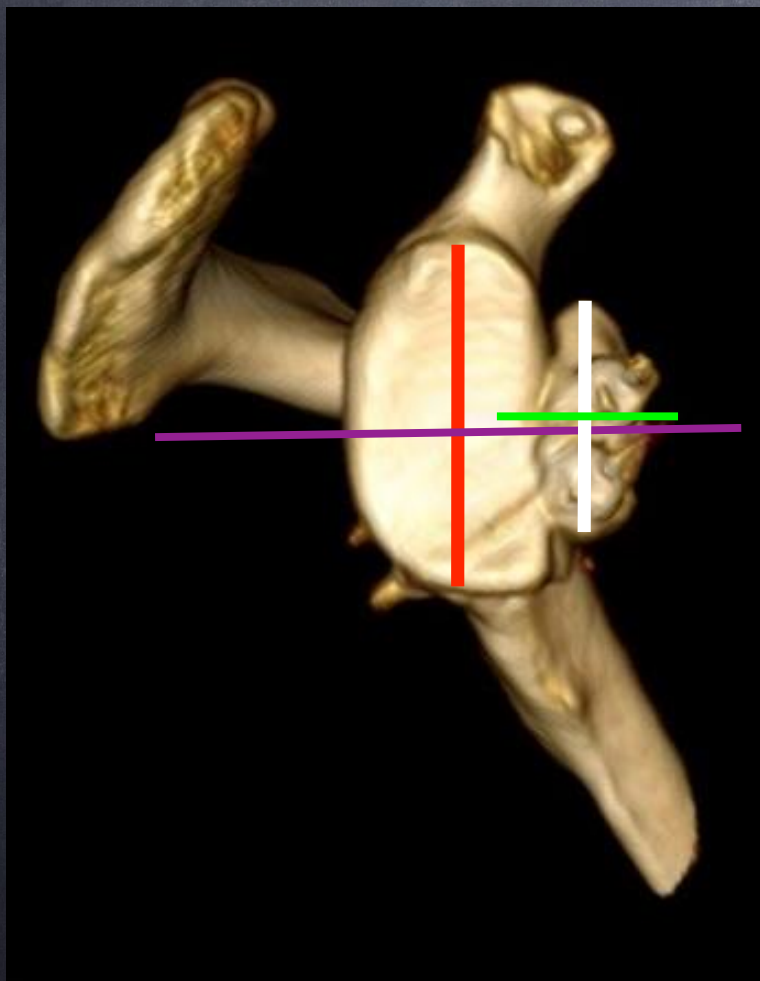


# Radiographic evaluation

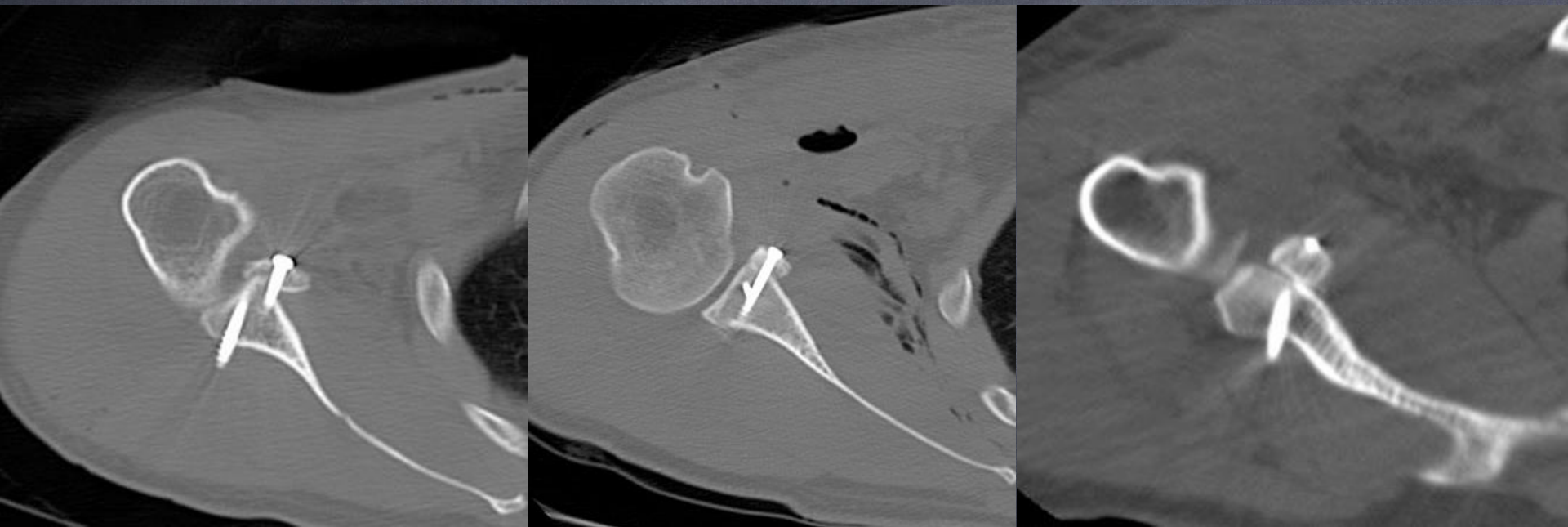
- Axial CT scan at: preop, immediate postop & 1-y postop
- Graft position
  - Superior-inferior: regarding equator
  - Medial-lateral:  $> 3\text{mm}$
- Screw orientation
- Graft resorption



# Graft position - superior-inferior



# Graft position - medial-lateral



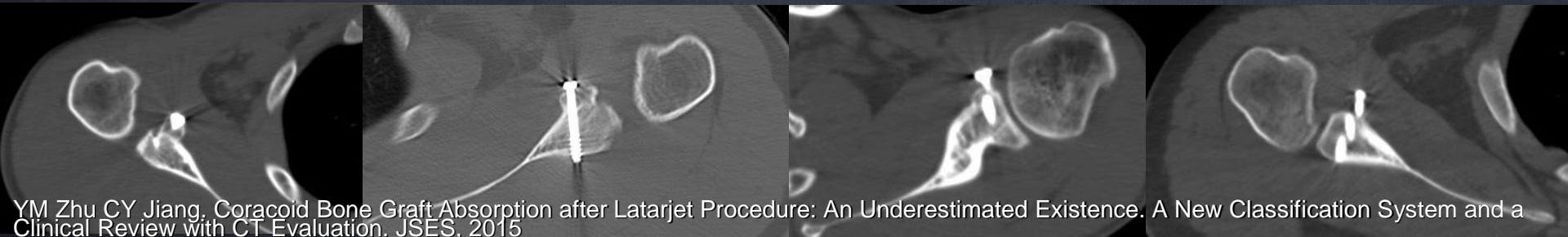


# Screw orientation



# Graft resorption

- **Grade 0:** The screw head is buried in the coracoid bone graft
- **Grade I:** Only the screw head is exposed outside the bone graft and the whole screw shaft is inside the bone
- **Grade II:** Part of the screw shaft is exposed outside the graft and there is still some bone left on the glenoid neck
- **Grade III:** Both of the screw head and shaft are totally exposed with all of the coracoid bone graft absorbed and no bone is left on the glenoid neck.



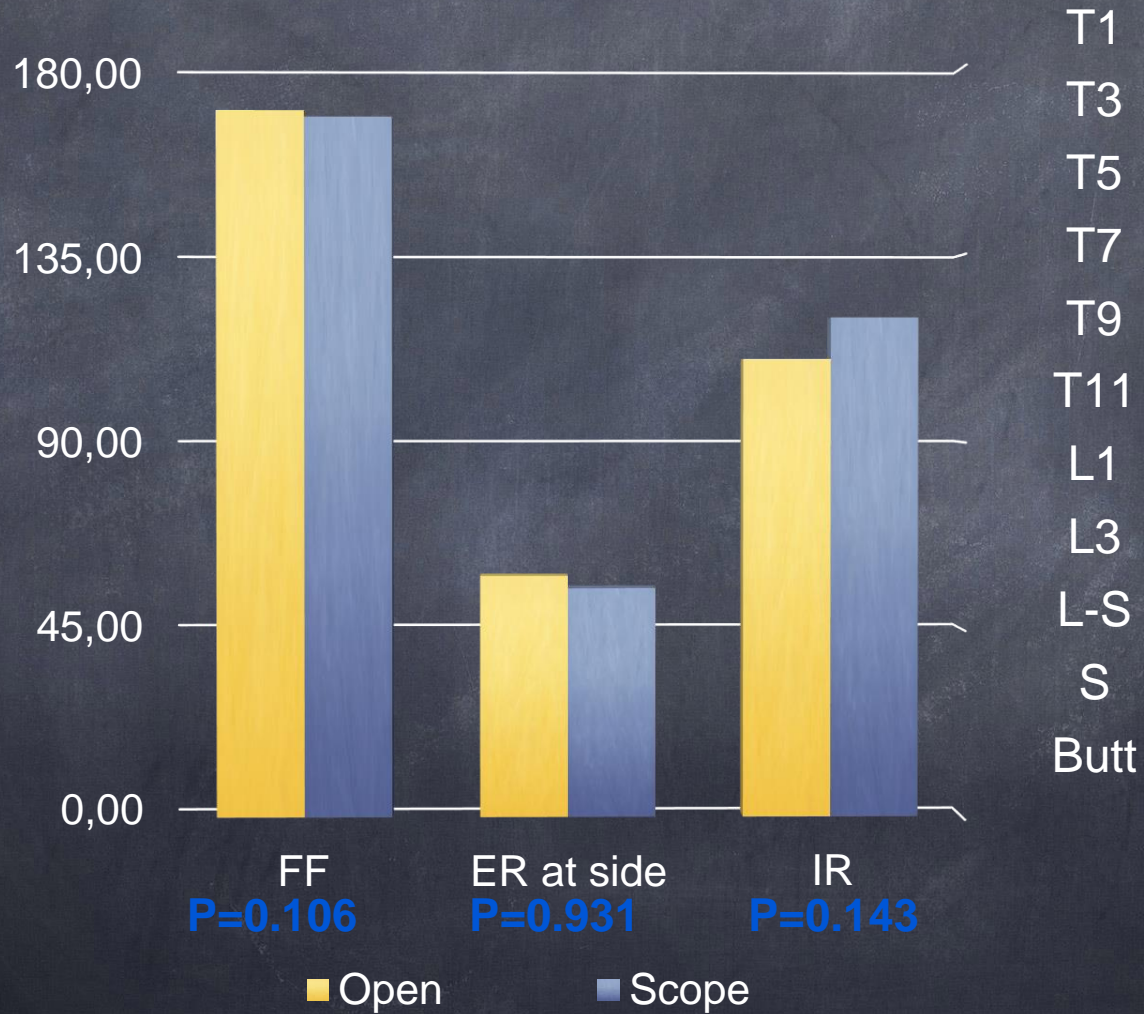


# Results

- Jan 2010 to Aug 2012, **44/47** open Latarjet
    - Mean age: 31.2-y
    - Ave. numbers of dislocation preop: 26.9 (5-150)
  - Feb 2013 to Aug 2014, **47/51** scope Latarjet
    - Mean age: 32.0-y
    - Ave. numbers of dislocation preop: 27.9 (2-400)
- 
- 

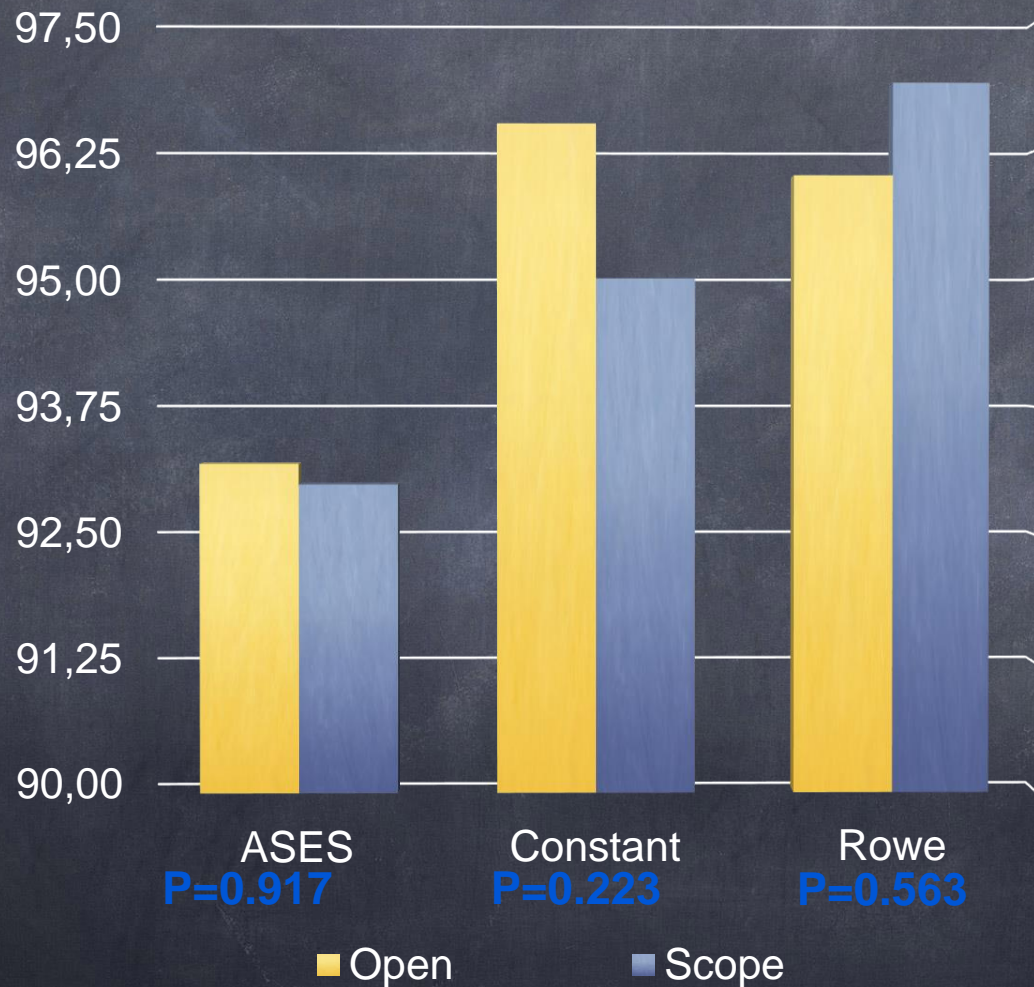


# Results - ROM





# Results - clinical evaluation





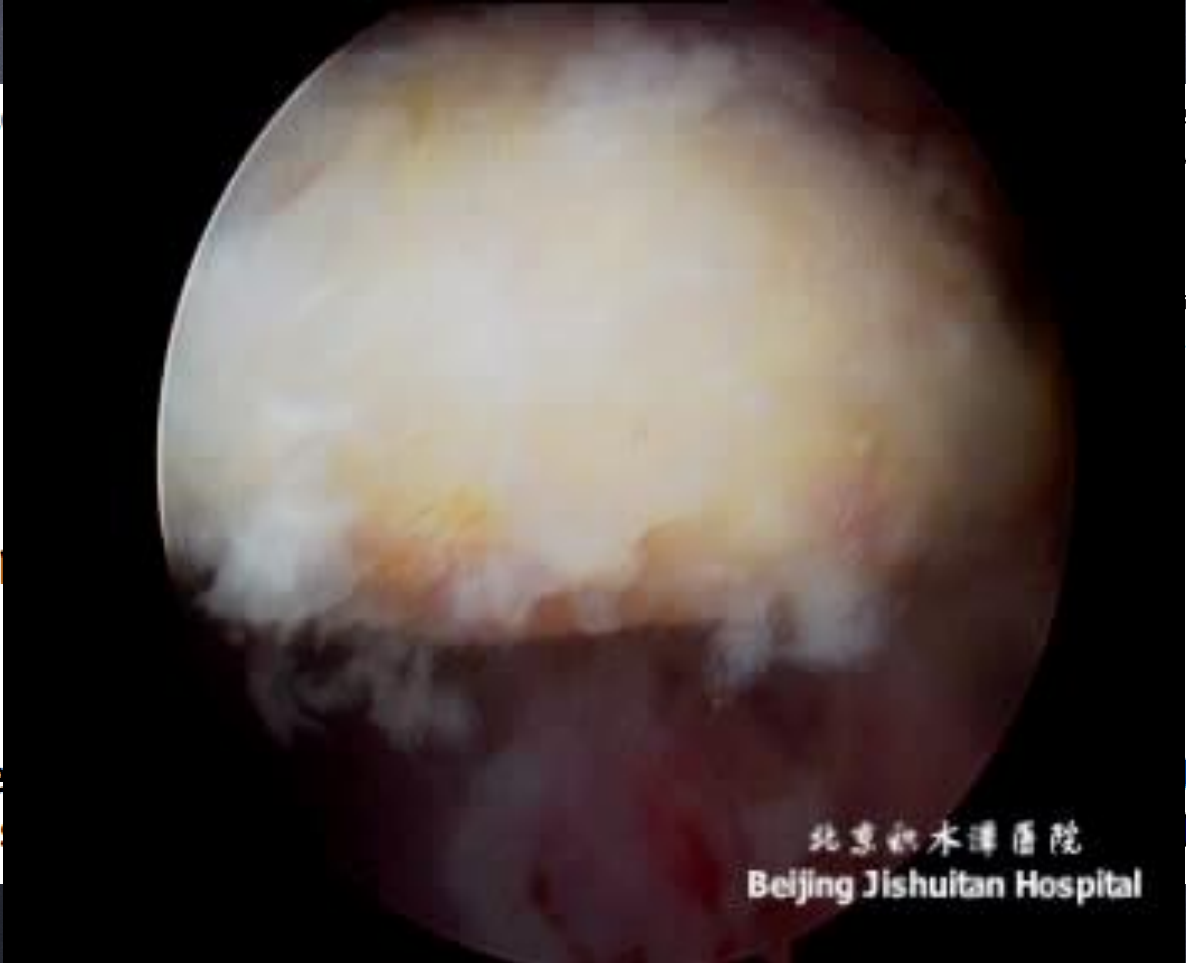
# Result - clinical evaluation

- Graft healing rate: 97.7% (1/44) in open vs. 100% in @
- No recurrence
- No apprehension




# Nerve safety during Latarjet

- JP Warner 2014: frequent nerve alert during open Latarjet



**J Shoulder Elbow Surg (2014)**



ELSEVIER


**2014 Nerve Safety during Latarjet**

Ruth A. Delane  
Kamen V. Vlasov

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**JOURNAL OF SHOULDER AND ELBOW SURGERY**

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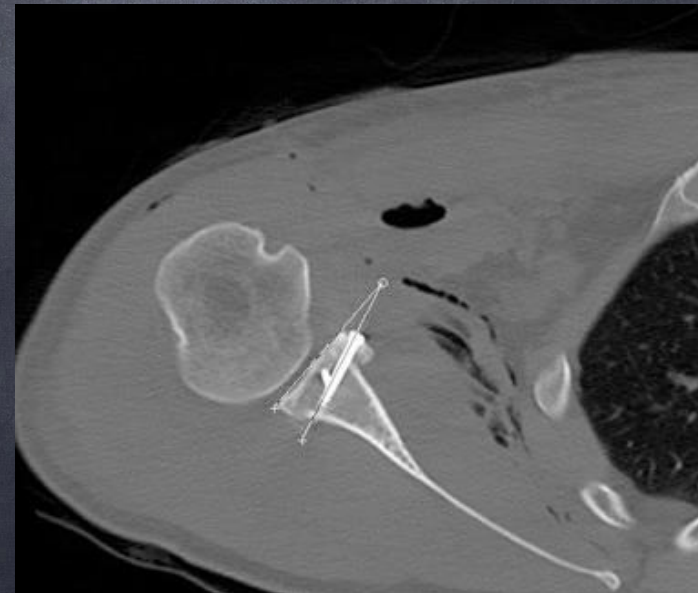


CrossMark

anfaza, MD<sup>b</sup>,  
D<sup>a,\*</sup>

# Radiographic evaluation results

- Screw orientation
  - open group:  $18.1 \pm 9.2^\circ$
  - scope group:  $21.9 \pm 10.4^\circ$
- No significant difference ( $p=0.174$ )





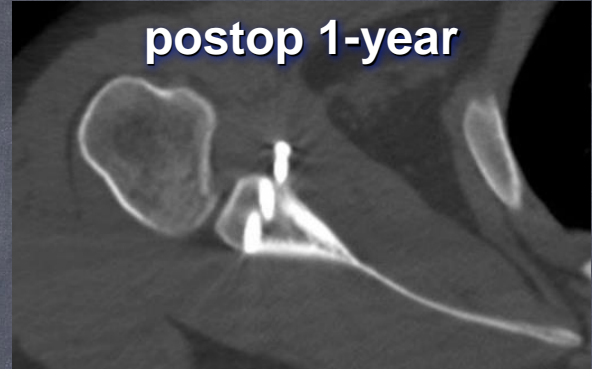
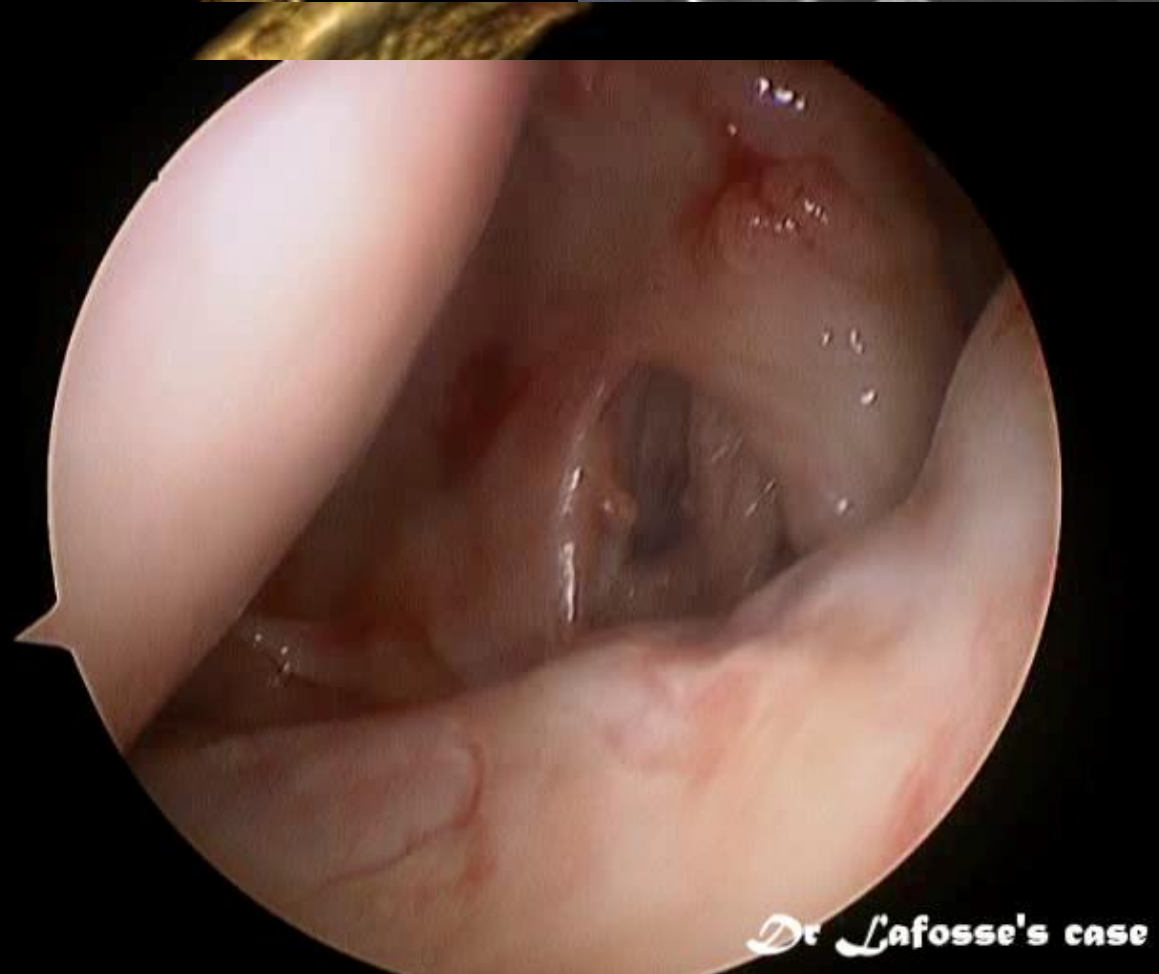
# Graft absorption after Latarjet

- J Allain: no effect on function
- Di Giacomo: no effect on stability or pain or ROM
- X Cassagnaud: severe absorption cause pain
- JV Lunn: risk factor for recurrence
- Lafosse: 3/62 prominent absorption required screw removal

preop

postop

postop 1-year



*Dr Lafosse's case*



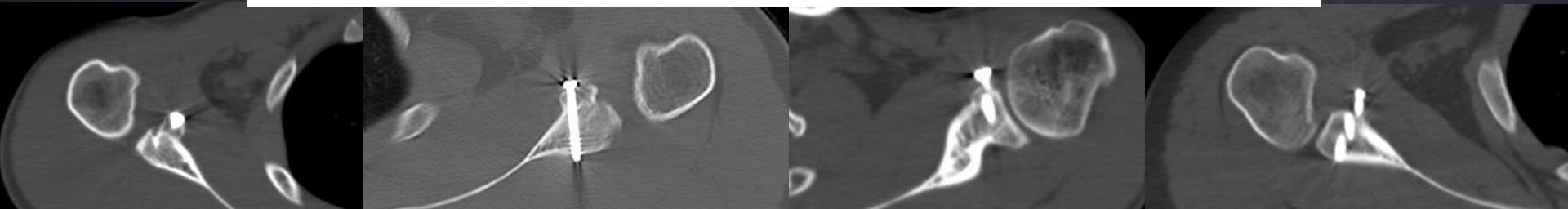


# Radiographic evaluation results

- Graft resorption

		Groups		Sum
		Arthroscopy	Open	
Resorption	0	8	2	10
	I	26	19	45
	II	13	17	30
	III	0	6	6
Total		47	44	92

$p=0.016$



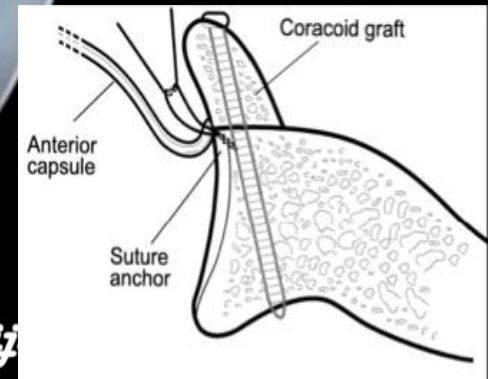
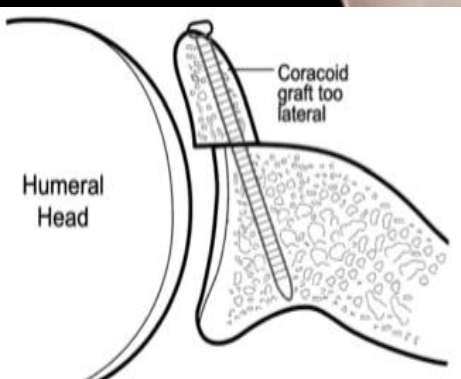
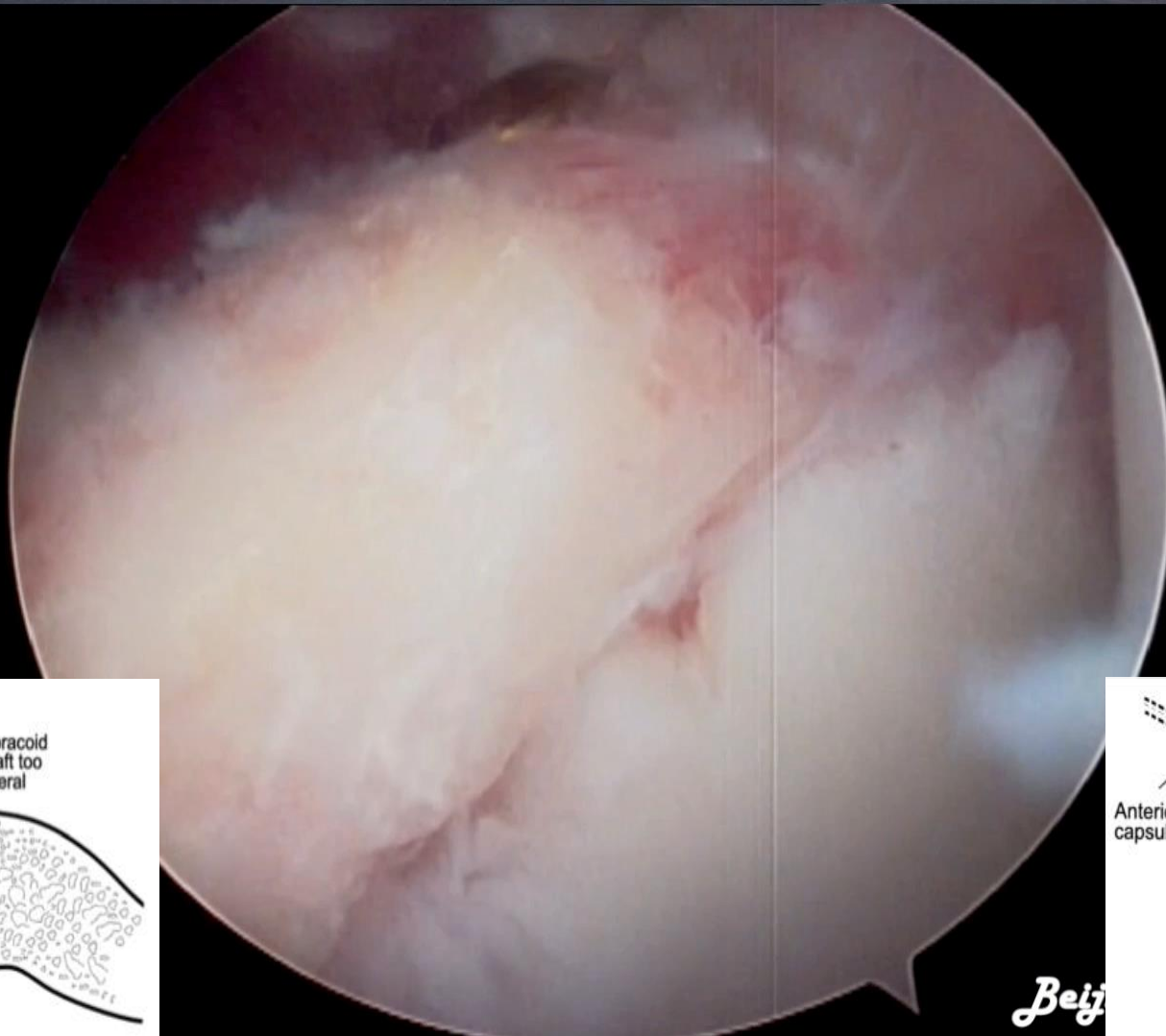
# Radiographic evaluation results

- Graft position
  - Superior-inferior: all below equator in open group, 3/47 above equator in @ group,  $p < 0.001$
  - Medial-lateral  $> 3\text{mm}$ : 2/44 in open, 1/47 in @,  $p = 0.496$
- Significant difference regarding S-I position





# Graft flush with the glenoid



# Arthroscopic vs Open Latarjet

- Very few comparative studies
- @ Latarjet: controversial
- “Difficult”: longer surgery time & learning curve
- Worth the effort ?





# Arthroscopic vs Open Latarjet



Open Latarjet



@ Latarjet

• Clinical outcome	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Graft union	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Graft position: S-I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Graft position: M-L	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Screw orientation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Graft resorption	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Axillary N. safety	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• Surgery time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



# Conclusions

- Both open & @ Latarjet:
  - reliable clinical outcome
  - comparable graft position & screw orientation
- Arthroscopic Latarjet:
  - Pros: **Better** graft resorption, more accurate
  - Cons: Long surgery time & learning curve





北京积水潭医院

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谢谢！

THANK YOU !