

# IX CONGRESSO NAZIONALE DMSA

## NOVITA' ORTOPEDICHE NEL TRATTAMENTO DELLE PATOLOGIE SPORTIVE



DOTT. ALBERTO RESIDORI

**CHIRURGIA GINOCCHIO e SPALLA**  
*Ospedale P.Pederzoli*  
*Peschiera del Garda (VERONA)*

### TEAM

Dr. Michele Malavolta  
Dr. Alberto Residori  
Dr. Andrea Cescatti  
Dr. Silvio Mezzari  
Dr. Gianpietro Lista

## NEW TEAM

### **GINOCCHIO**

Dott. Malavolta  
Dott. Residori  
Dott. Mezzari  
Dott. Lista

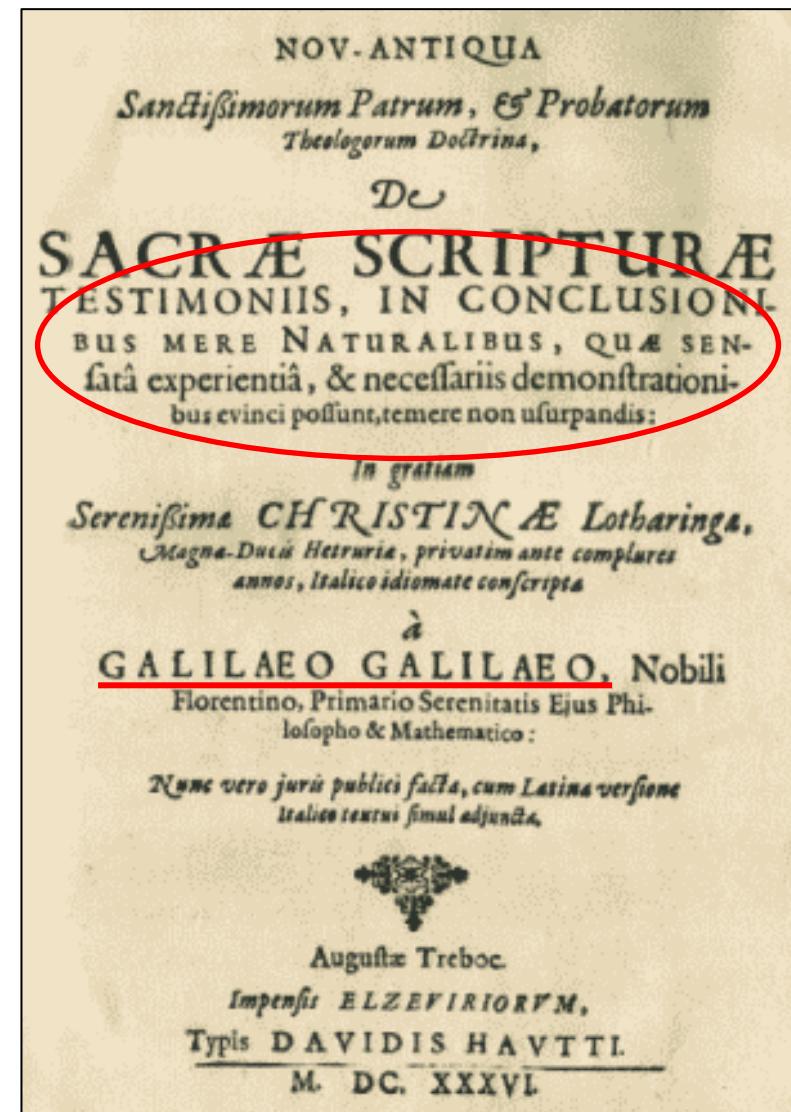
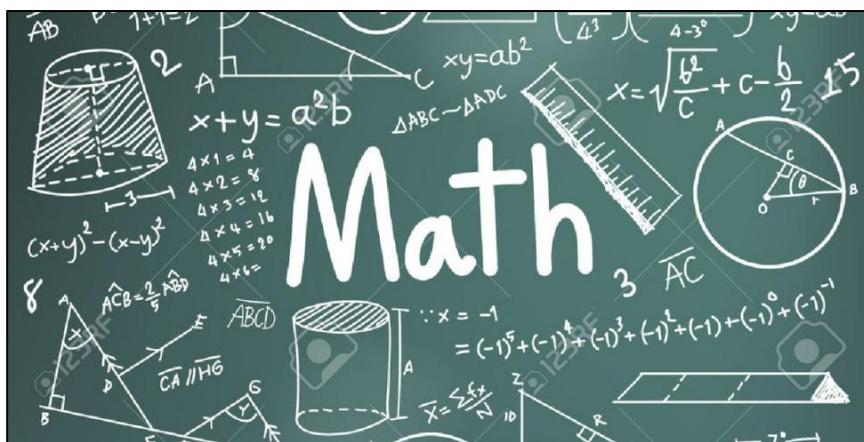
### **SPALLA**

Dott. Residori  
Dott. Cescatti  
Dott. Mezzari



# IX CONGRESSO NAZIONALE DMSA

MEDICINA NON E' UNA  
SCIENZA ESATTA...  
MA CI SI DOVREBBE  
AVVICINARE...  
E DEVE BASARSI SU UN  
METODO SCIENTIFICO E NON  
SOLO SU ESPERIENZE  
PERSONALI



# IX CONGRESSO NAZIONALE DMSA

## INSTABILITA'



**GINOCCHIO**  
Lesione LCA

**SPALLA**  
Lussazione  
gleno/omerale  
antero-inferiore

### MEDICINA RIGENERATIVA

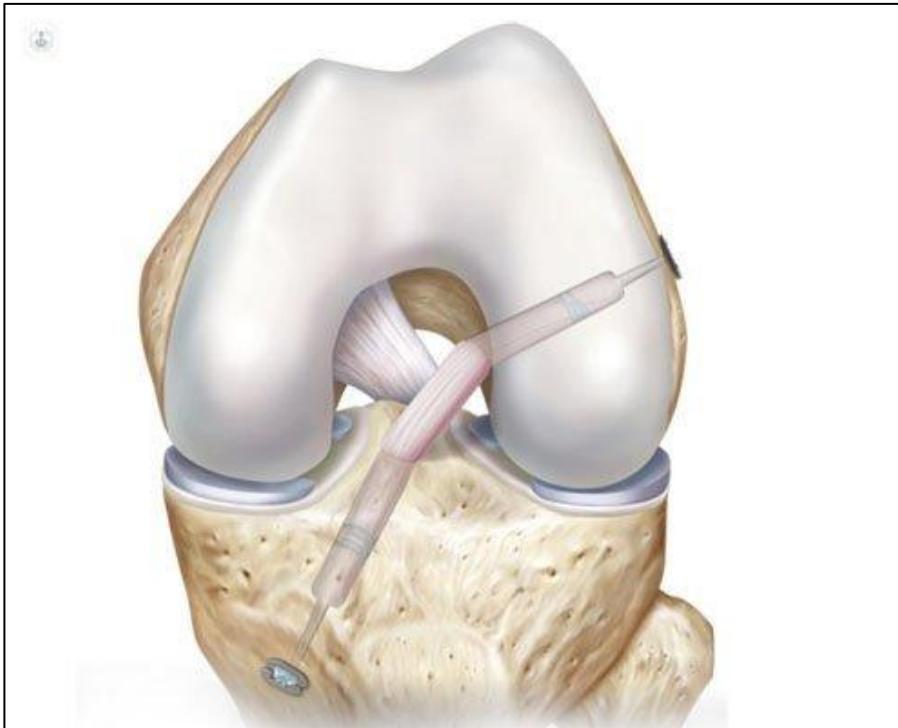
- PRP
- LIPOGEMS

# IX CONGRESSO NAZIONALE DMSA

**NOVITA' ORTOPEDICHE NEL  
TRATTAMENTO DELLE  
PATOLOGIE SPORTIVE**



**INSTABILITA' GINOCCHIO  
DA LESIONE LCA**



# IX CONGRESSO NAZIONALE DMSA

## RICOSTRUZIONE LCA

Risultati letteratura...fino a 20% recidive...

...il problema è solo LCA o c'è ALTRO???

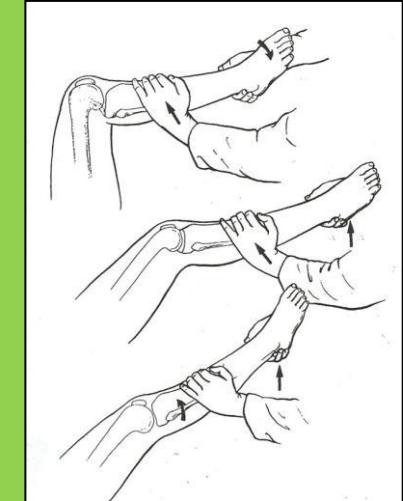


# IX CONGRESSO NAZIONALE DMSA

## RICOSTRUZIONE LCA

### ANALIZZARE I FALLIMENTI

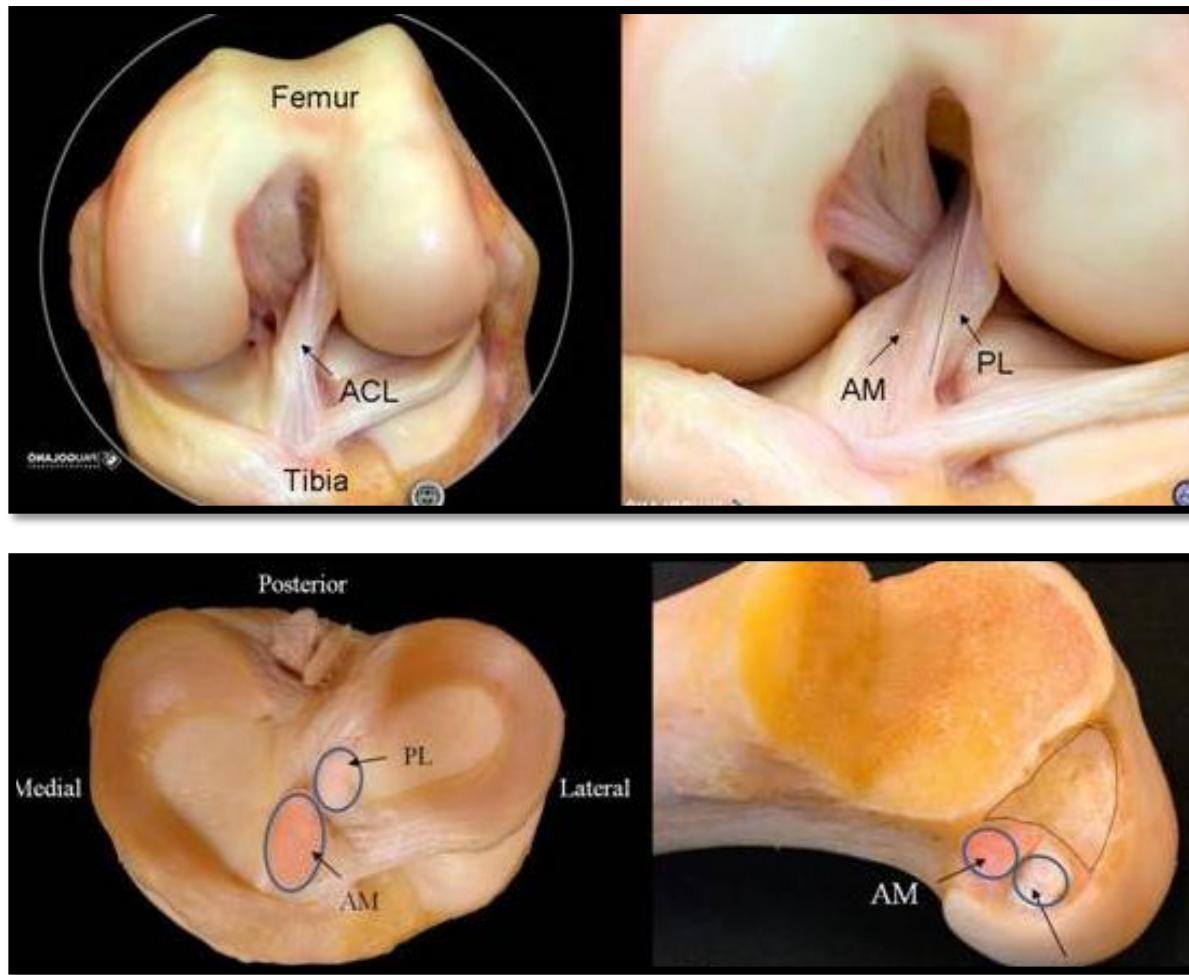
- Età inferiore ai 20 anni
- Ginocchio recurvato
- Lesione LCA controlaterale
- Pivot shift ++
- Teoria genetica??? (>F)
- Posizionamento non anatomico dei tunnel tibiale e femorale
- Mancato trattamento delle lesioni periferiche



### INSTABILITA' ROTAZIONALE!!!

Sonnery-Cottet B, Daggett M, Fayard JM, Ferretti A, Helito CP, Lind M, Monaco E, de Pádua VBC, Thaunat M, Wilson A, Zaffagnini S, Zijl J, Claes S. Anterolateral Ligament Expert Group consensus paper on the management of internal rotation and instability of the anterior cruciate ligament - deficient knee. J Orthop Traumatol. 2017 Jun;18(2):91-106.

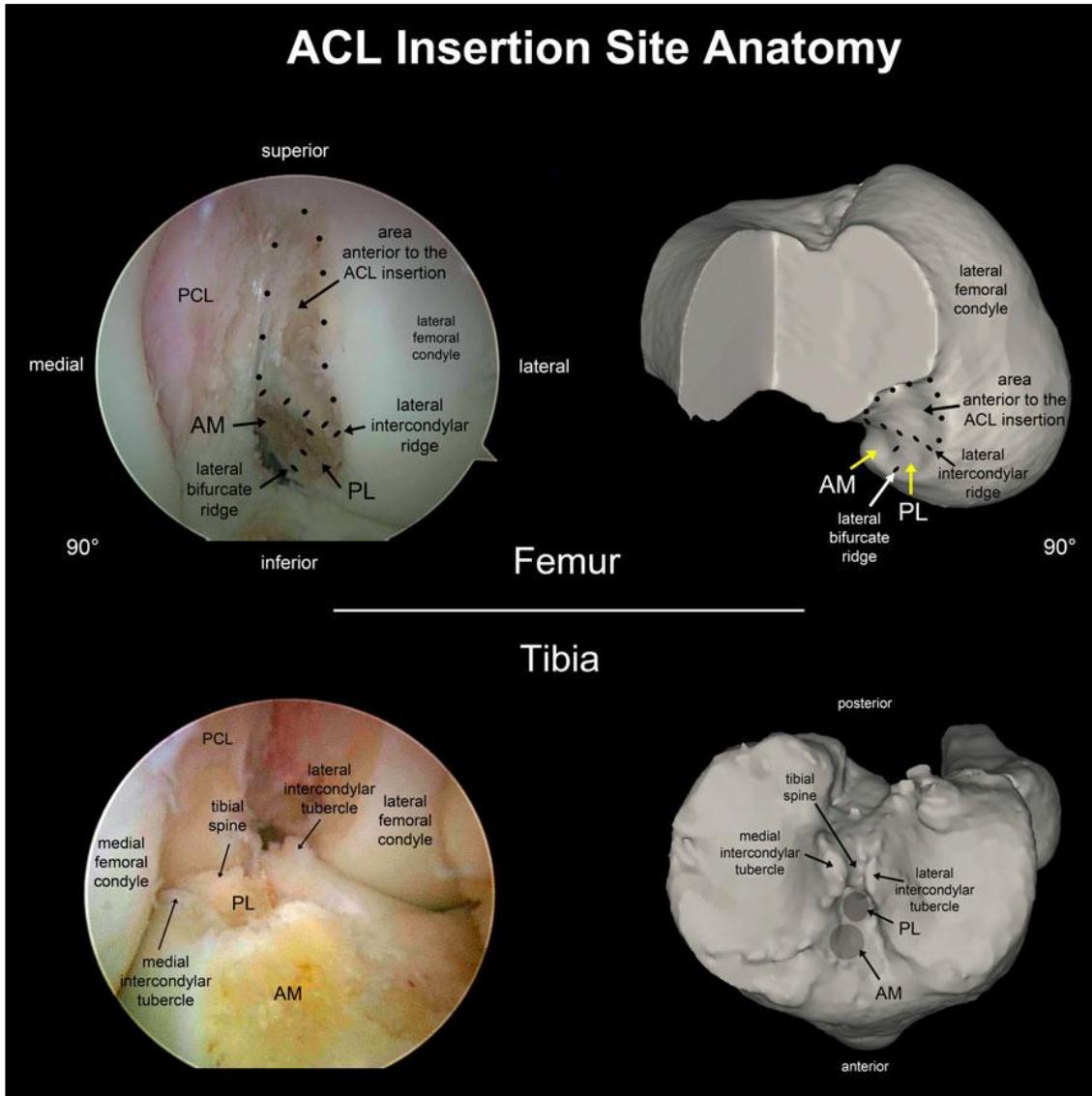
# IX CONGRESSO NAZIONALE DMSA



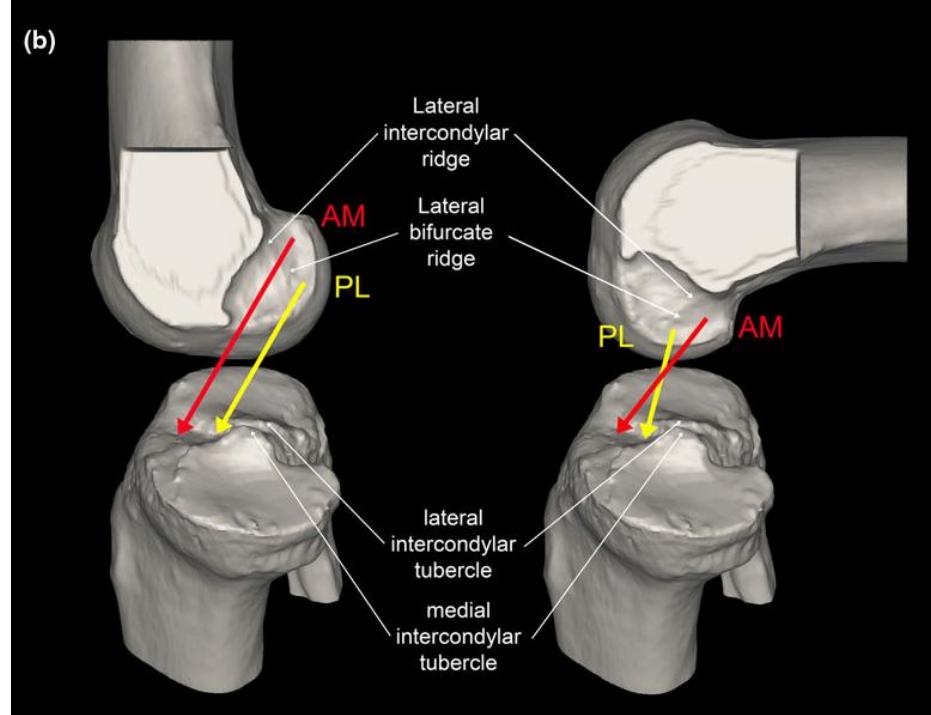
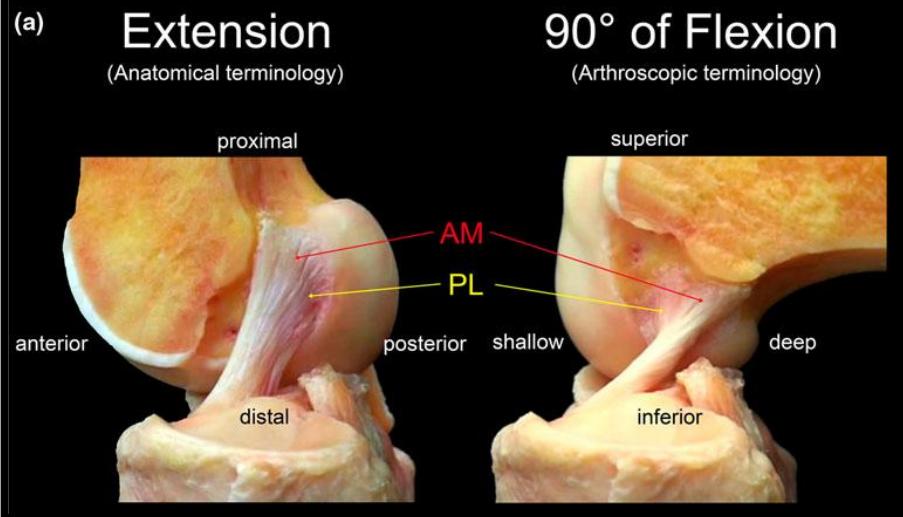
Loh JC, Fukuda Y, Tsuda E, Steadman RJ, Fu FH, Woo SL. **Knee stability and graft function following anterior cruciate ligament reconstruction: Comparison between 11 o'clock and 10 o'clock femoral tunnel placement.** 2002 Richard O'Connor Award paper. Arthroscopy. 2003 Mar;19(3):297-304.

# IX CONGRESSO NAZIONALE DMSA

## ACL Insertion Site Anatomy



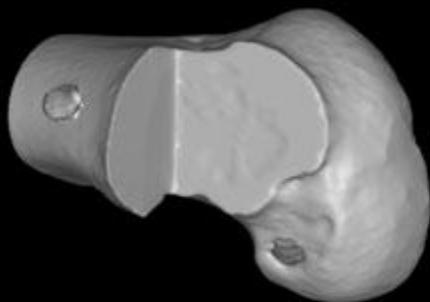
# IX CONGRESSO NAZIONALE DMSA



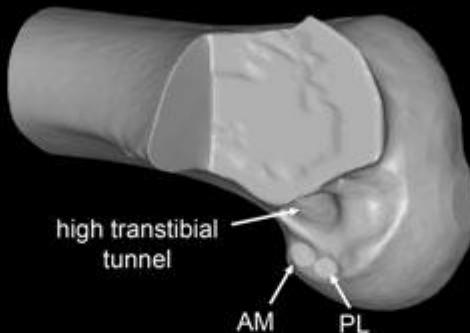
Rayan F, Nanjayan SK, Quah C, Ramoutar D, Konan S, Haddad FS **Review of evolution of tunnel position in anterior cruciate ligament reconstruction.** World J Orthop. 2015 Mar 18;6(2):252-62. doi: 10.5312/wjo.v6.i2.252. eCollection 2015.

# IX CONGRESSO NAZIONALE DMSA

1980's open surgery



1990's transtibial SB



2000's early DB



Anatomic SB



Anatomic DB



~ 90° of knee flexion

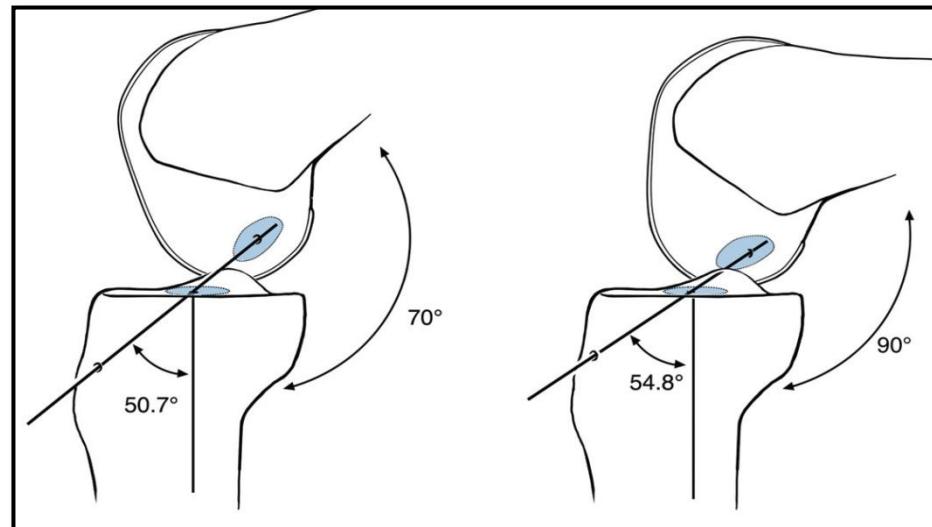
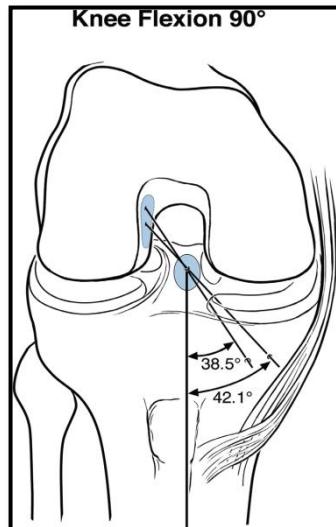
# IX CONGRESSO NAZIONALE DMSA

## Anatomical Limitations of Transtibial Drilling in Anterior Cruciate Ligament Reconstruction

James F. Heming, Jason Rand and Mark E. Steiner  
*Am J Sports Med* 2007 35: 1708 originally published online July 30, 2007  
DOI: 10.1177/0363546507304137

The transtibial technique can produce tunnels centered in the anterior cruciate ligament footprints, but a starting point close to the tibial joint line is required. This will result in a relatively short tibial tunnel. If tunnels centered in the anterior cruciate ligament attachment sites are desired with the transtibial drilling technique, then a short tibial tunnel is necessary. A short tibial tunnel may compromise graft fixation and graft incorporation, or it may result in a tunnel length–graft length mismatch.

An alternative drilling strategy might be employed.



# IX CONGRESSO NAZIONALE DMSA

NCBI Resources ▾ How To ▾

**PubMed.gov**  
US National Library of Medicine  
National Institutes of Health

PubMed ▾  Search Advanced

Abstract ▾ Send to: ▾

[Arthroscopy](#), 2009 Jan;25(1):95-101. doi: 10.1016/j.arthro.2008.10.012.

**Anteromedial portal technique for the anterior cruciate ligament femoral socket: pitfalls and solutions.**

Lubowitz JH<sup>1</sup>.

 Author information

**Abstract**  
Creating the anterior cruciate ligament (ACL) femoral socket using the anteromedial (AM) portal technique has advantages. Furthermore, the technique is ideal for anatomic double-bundle (particularly posterolateral bundle) and all-inside ACL techniques. However, although the AM portal technique has advantages, the learning curve is steep when making the transition from familiar, transtibial reaming to the AM portal technique for ACL femoral tunnel creation. Complications and challenges are many when learning the AM portal technique. The purpose of this technical note is to describe tips and pearls for surgeons contemplating the transition to the AM portal technique for the ACL femoral socket.

**Comment in**  
[Challenges and risks of the anteromedial portal. \[Arthroscopy. 2009\]](#)  
[The anterior medial portal. \[Arthroscopy. 2009\]](#)

PMID: 19111224 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms

LinkOut - more resources

# IX CONGRESSO NAZIONALE DMSA

NCBI Resources How To

PubMed.gov US National Library of Medicine National Institutes of Health

PubMed Advanced Search

Abstract Send to:

Arthroscopy. 2008 Dec;24(12):1349-57. doi: 10.1016/j.arthro.2008.07.018. Epub 2008 Oct 1.

**Tunnel enlargement after double-bundle anterior cruciate ligament reconstruction: a prospective, randomized study.**

Järvelä T<sup>1</sup>, Moisala AS, Paakkala T, Paakkala A.

**Author information**

**Abstract**

**PURPOSE:** The aim of this study was to compare tunnel enlargement in patients with double-bundle and single-bundle anterior cruciate ligament (ACL) reconstruction.

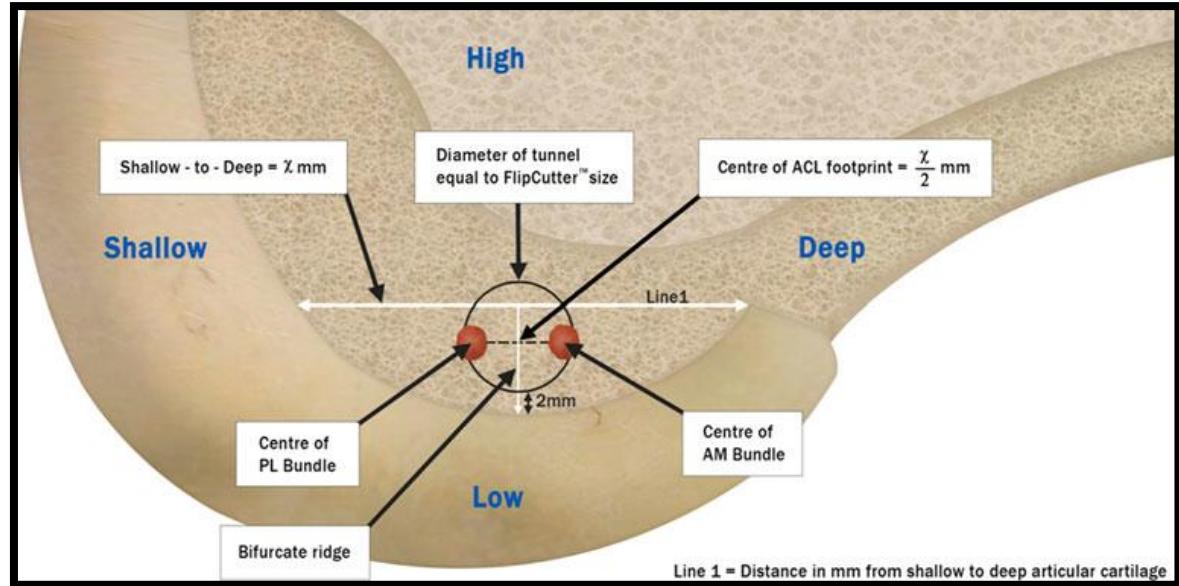
**METHODS:** Sixty patients were randomized by closed envelopes into 2 different groups of ACL reconstruction with hamstring tendons: double-bundle technique with bioabsorbable screw fixation ( $n = 35$ ) and single-bundle technique with bioabsorbable screw fixation ( $n = 25$ ). Magnetic resonance imaging evaluation was performed in 53 patients (88%) (32 in double-bundle group and 21 in single-bundle group) for a mean of 27 months' follow-up (range, 24 to 36 months). Tunnel enlargement was determined by digital measurement of the widths perpendicular to the long axis of the tunnels on an oblique coronal and sagittal plane. The magnetic resonance imaging measurements were compared with the intraoperative drill diameter.

**RESULTS:** No significant differences were found between the double-bundle group and the single-bundle group in tunnel enlargement on the femoral side. However, on the tibial side, tunnel enlargement was greater in the single-bundle group than in the double-bundle group in each tunnel ( $P = .051$ ). In all knees, tunnel enlargement both on the tibial side and on the femoral side correlated significantly with the anterior and rotational laxity of the operated knee. In the double-bundle group, no tunnel communication between the anteromedial and posterolateral tunnels was seen in any of the patients on either the tibial side or femoral side.

**CONCLUSIONS:** This prospective, randomized study showed that our double-bundle ACL reconstruction technique results in less tunnel enlargement in each tunnel on the tibial side than the single-bundle technique with similar fixation methods, graft material, and rehabilitation. In addition, no tunnel communication was observed in the patients undergoing double-bundle ACL reconstruction. The clinical results were good in both groups. However, the patients who had more tunnel enlargement had significantly more anterior and rotational laxity of the operated knee as well.

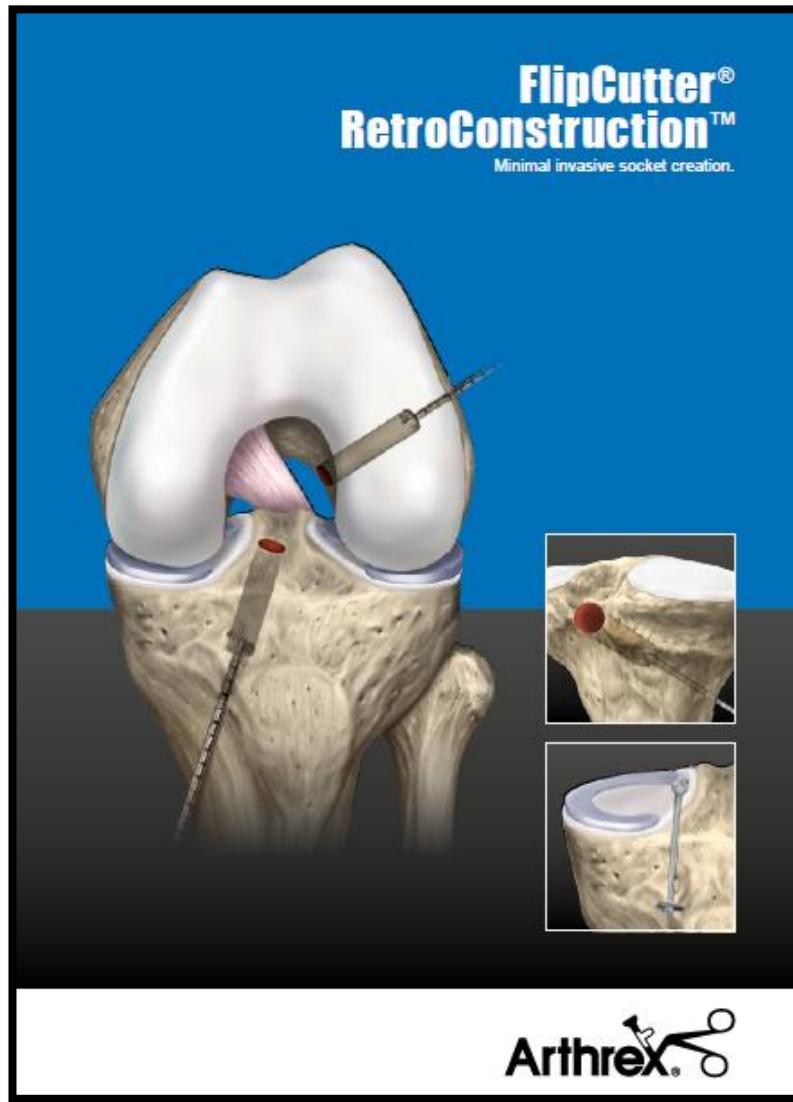
**LEVEL OF EVIDENCE:** Level I, therapeutic randomized controlled trial.

# IX CONGRESSO NAZIONALE DMSA



1. James Lubowitz, MD, et al, ACL Femoral Footprint Anatomy: Systematic Review of the 21st Century Literature, Arthroscopy, accepted for publication, 2012.
2. Lubowitz J, Konicek J, A 3.5 mm Diameter Anterior Cruciate Ligament Tibial Retrograde Socket Drilling Pin is More Accurate than a 2.4 mm Diameter Pin. Arthroscopy 2011; 26:666-671.

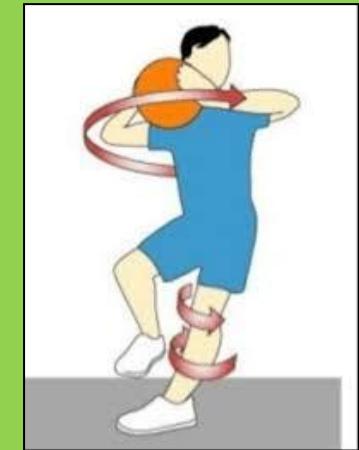
# IX CONGRESSO NAZIONALE DMSA



## RICOSTRUZIONE LCA

### ANALIZZARE I FALLIMENTI

- Età inferiore ai 20 anni
- Ginocchio recurvato
- Lesione LCA controlaterale
- Pivot shift ++
- Teoria genetica???(>F)
- Posizionamento non anatomico dei tunnel tibiale e femorale
- Mancato trattamento delle lesioni periferiche



**Ricostruzione antomica < recidive...ma comunque tassi ALTI!!!**

Sonnery-Cottet B, Daggett M, Fayard JM, Ferretti A, Helito CP, Lind M, Monaco E, de Pádua VBC, Thaunat M, Wilson A, Zaffagnini S, Zijl J, Claes S. Anterolateral Ligament Expert Group consensus paper on the management of internal rotation and instability of the anterior cruciate ligament - deficient knee. J Orthop Traumatol. 2017 Jun;18(2):91-106.

# IX CONGRESSO NAZIONALE DMSA



J Anat (2013) 223, pp321–328

doi: 10.1111/joa.12087

## Anatomy of the anterolateral ligament of the knee

Steven Claes,<sup>1</sup> Evie Veree

Johan Bellemans<sup>1</sup>

<sup>1</sup>Department of Orthopedic Surgery, University of Michigan, Ann Arbor, MI.

*m*  
Leuven, Kortrijk, Belgium

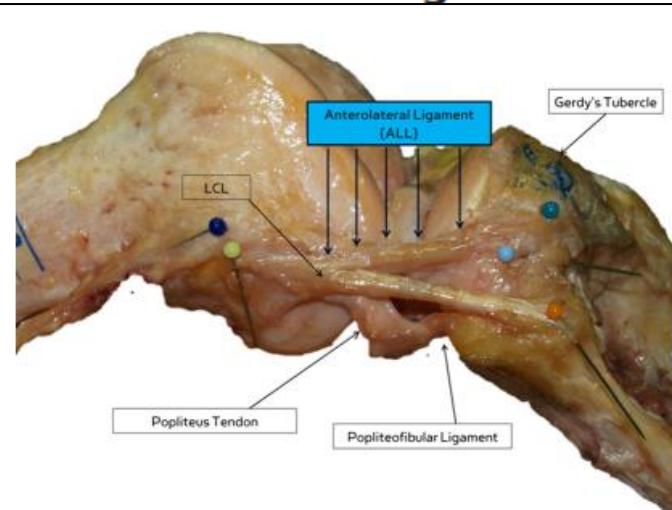
<sup>2</sup>Department of Development a

<sup>3</sup>Department of Orthopedic Surgery

<sup>4</sup>Antwerp Orthopedic Center, Belgium

## Abstract

In 1879, the French surgeon anterolateral aspect of the surrounding this anatomic ligament', 'capsulo-osseous description has yet been published hereafter termed anterolateral femoral and tibial attachment studied both qualitatively as a well-defined ligamentous



**Fig. 1** Anatomic dissection. The relationship of the anterolateral ligament (ALL) with the lateral collateral ligament (LCL), Gerdy's tubercle, popliteofibular ligament and popliteus tendon From [15] by Anatomical Society. Reprinted with permission

the ALL was situated at the prominence of the lateral femoral epicondyle, slightly anterior to the origin of the lateral collateral ligament, although connecting fibers between the two structures were observed. The ALL showed an oblique course to the anterolateral aspect of the proximal tibia, with firm attachments to the

# IX CONGRESSO NAZIONALE DMSA

## ArthroLab Workshop Knee

ArthroLab | Erwin-Hielscher-Str. 9 | 81249 Munich

Faculty	Dr. Malavolta   Dr. Kluzik   Dr. Residori   Dr. Mezzani
Date	Friday, April 15, 2016
Location	ArthroLab   Erwin-Hielscher-Str. 9   81249 Munich

### Program | Friday, April 15, 2016

08:00 - 08:30	Welcome & Coffee	Doctor's Lounge
08:30 - 09:45	Presentation: • Introduction	Dr. Malavolta, Dr. Kluzik
09:45 - 10:15	Presentation: • ACL and ALL Reconstruction	Dr. Malavolta, Dr. Residori
10:15 - 11:30	WetLab Session – Part #1 • All-Inside ACL Reconstruction using GraftLink® • ALL Reconstruction using SwiveLock®	
11:30 - 11:40	Coffee Break	Doctor's Lounge
11:40 - 13:00	WetLab Session – Part #2 • MPFL Reconstruction using SwiveLock® & Bio-Interference • Scones • TrochlearPlasty	
13:00 - 13:30	Lunch Break	Arthrex Cafeteria
13:30 - 14:30	Presentation: • Knee Arthroplasty using iBalance® UKA	Dr. Malavolta, Dr. Mezzani
14:30 - 15:00	Coffee Break	Doctor's Lounge
15:00 - 17:00	WetLab Session – Part #3 • Knee Arthroplasty using iBalance® UKA	
17:00	End of Course	

ArthroLab™



© Arthrex GmbH, 2016. All rights reserved.

## MECCANISMO LESIONE VALGO ROTAZIONE ESTERNA (lcm, lca, impatto osseo esterno)...MA PRIMA VARO ROTAZIONE INTERNA CON LESIONE COMPARTO ESTERNO

J Orthop Traumatol (2017) 18:91–106  
DOI 10.1007/s10195-017-0449-8



CrossMark

---

EMERGING TOPIC (REVIEW ARTICLE)

### **Anterolateral Ligament Expert Group consensus paper on the management of internal rotation and instability of the anterior cruciate ligament - deficient knee**

Bertrand Sonnery-Cottet<sup>1</sup> · Matthew Daggett<sup>2</sup> · Jean-Marie Fayard<sup>1</sup> ·  
Andrea Ferretti<sup>3</sup> · Camilo Partezani Helito<sup>4</sup> · Martin Lind<sup>5</sup> · Edoardo Monaco<sup>3</sup> ·  
Vitor Barion Castro de Pádua<sup>6</sup> · Mathieu Thaunat<sup>1</sup> · Adrian Wilson<sup>7</sup> ·  
Stefano Zaffagnini<sup>8</sup> · Jacco Zijl<sup>9</sup> · Steven Claes<sup>10</sup>

Published online: 20 February 2017

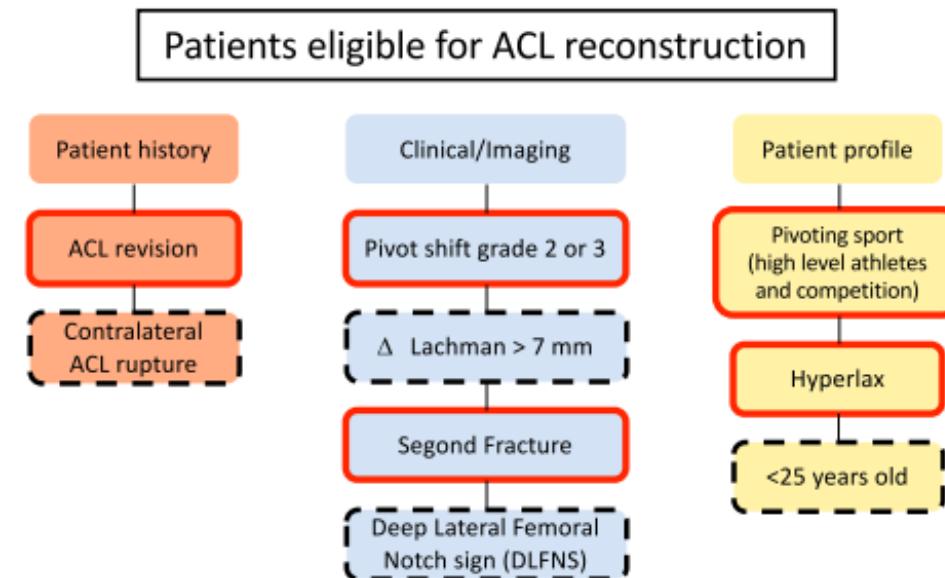
© The Author(s) 2017. This article is published with open access at Springerlink.com

# IX CONGRESSO NAZIONALE DMSA

98

J Orthop Traumatol (2017) 18:91–106

Fig. 5 Decision tree



*Minimal requirements for ACL + minimally invasive ALL reconstruction:  
1 decisive criteria or 2 secondary criteria*



Decisive criteria



Secondary criteria

# IX CONGRESSO NAZIONALE DMSA



The pioneers: Isolated lateral tenodesis

- Marcel Lemaire, 1967

50 years!  
and still  
debated...

Lemaire M. Rupture ancienne du ligament croisé antérieur du genou : fréquence, clinique, traitement (46 cas). J Chir 1967;83:311–20.

# IX CONGRESSO NAZIONALE DMSA

## POMERIGGIO ORTOPEDICO



### FACULTY

F.Azzola  
G.Bonaspelli  
V.Candello  
A.Ferretti  
V.Madonna  
M.Malavolta  
F.Matassi  
S.Mazzari  
M.Ricci  
A.Residori  
P.Sembenini  
G.Zanon  
G.Zappalà

### Organizzatore

Michele MALAVOLTA  
*Responsabile*  
**CHIRURGIA GINOCCHIO**  
CdC dott. Pederzoli  
Peschiera del Garda  
VERONA



## IL COMPLESSO ANTERO ESTERNO DEL GINOCCHIO Il punto & Relive Surgery

VENERDÌ 10 MARZO 2017  
ore 15:00

CdC DOTT. PEDERZOLI  
Via Monte Baldo 24 - 37019 Peschiera d/G (Verona)

ISCRIZIONE GRATUITA PREVIA PRENOTAZIONE  
Richiesto accreditamento ECM per medici ortopedici e fisiatri

# IX CONGRESSO NAZIONALE DMSA

## PREMIO MIGLIOR POSTER S.I.A. 2017

### PLASTICA ANTERO-ESTERNA DI LEMAIRE MODIFICATA ASSOCIA TÀ ALLA RICOSTRUZIONE DEL LEGAMENTO CROCIATO ANTERIORE



XXIII Congresso Nazionale S.I.A. - Società Italiana di Artroscopia

Palazzo Mauro de Andrè, Ravenna 12-14 Ottobre 2017



A. Residori, S. Mezzari, G. Lista, M. Malavolta

Divisione Chirurgia del Ginocchio, Ospedale P. Pederzoli, Peschiera del Garda (VR)  
Responsabile: dott. Michele Malavolta

**OBIETTIVO:** Come evidenziato in letteratura la ricostruzione del legamento crociato anteriore (LCA) è gravata da significativi tassi di recidiva. I fattori che influenzano i fallimenti sono: età inferiore ai 20 anni, ginocchio recurvatum, marcato pivot shift, sport da pivot, lesione del LCA controlaterale, il posizionamento non anatomico dei tunnel tibiale e femorale e il mancato trattamento delle lesioni periferiche [1]. Le plastiche periferiche non sono certamente un argomento nuovo [2,3]; il merito di aver portato il focus sulle lesioni del comparto antero-esterno va attribuito a Claes con la (ri)scoperta del legamento antero-laterale (ALL) [4]; in realtà ancora molto dibattuti sono sia la reale esistenza che l'effettivo ruolo del ALL. Utilizzando la tecnica anatomicamente originariamente proposta da Claes, abbiamo riscontrato alcune problematiche, in particolare la difficoltà nell' individuare i punti isometrici di inserzione. La nostra proposta è quella invece di una tecnica non anatomico, che ha come base la tecnica di Lemaire [5] della scuola Lionesse modificata da D. Dejour [6], con l'obiettivo di proteggere il neo-LCA dall' intra-rotazione che sembra essere il primum movens nella biomeccanica delle lesioni del LCA. In tal senso Ellison descriveva l'LCA come 'il mozzo della ruota', notando come è più facile controllare la rotazione di una ruota dal suo bordo che dal mozzo [7].

**MATERIALI E METODI:** Ricostruiamo l'LCA a livello femorale con tecnica out-in con retro drill (Flip Cutter Arthrex) che ci permette di posizionare il neo-

# IX CONGRESSO NAZIONALE DMSA

## PLASTICA ANTERO-ESTERNA DI LEMAIRE MODIFICATA



# IX CONGRESSO NAZIONALE DMSA

FISIOTERAPIA???

STESSI PROTOCOLLI UTILIZZATI PER LA RICOSTRUZIONE ISOLATA  
DEL LCA



**INSTABILITA' SPALLA  
DA LUSSAZIONE ANTERO-INFERIORE**



## Articolazione gleno-omerale

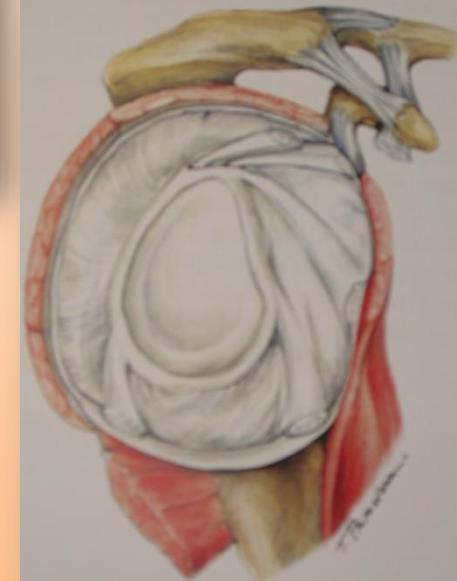
- ROM maggiore
- Articolazione più instabile (solo 1/3 testa omerale articola con la glenoide)
- 2% della popolazione generale
- 94% antero-inferiori
- < 5% posteriori
- < 0,5% erecta



## Stabilità gleno-omerale

### FATTORI STATICI

- Versione articolare
- Strutture ossee
- Conformazione articolare
- Labbro glenoideo
- Pressione intra-articolare
- Adesione/Coesione
- Strutture capsulo-legamentose



## Stabilità gleno-omerale

### FATTORI DINAMICI

- Cuffia dei rotatori
- CLBB
- Scapolotoracica
- Proprioceuzione



# IX CONGRESSO NAZIONALE DMSA

L'instabilità dell'articolazione gleno-omerale è una condizione patologica in cui i capi articolari perdono la loro naturale congruenza biomeccanica, generando per eziologie diverse stati clinici differenti.

Clinicamente si presenta con reperti obiettivi che possono essere sia eclatanti che subdoli, generando quindi difficoltà sia nell'inquadramento diagnostico che successivamente in quello terapeutico.



## Classificazione instabilità gleno-omerale

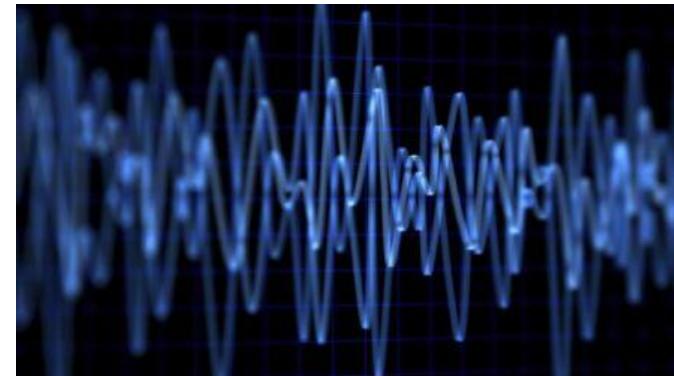
**GRADO DI**

**INSTABILITA'**

- Lussazione
- Sublussazione
- Microinstabilità

**FREQUENZA DI INSTABILITA'**

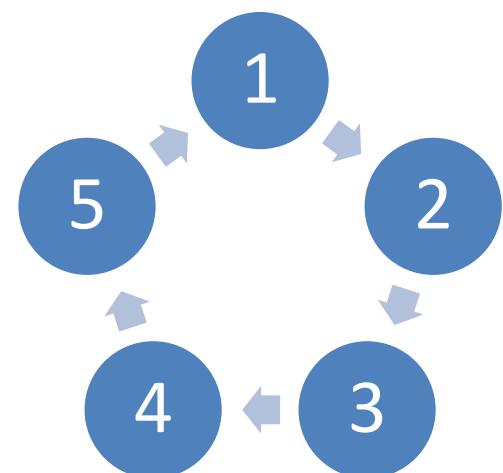
- Acuta
- Cronica



## Lussazione cronica

- Lussazione **recidivante** se un soggetto subisce un trauma e per la seconda volta la spalla si lussa
- Dopo il IV-V episodio di lussazione siamo di fronte ad una lussazione **ricorrente / abituale**

Ma la differenza **NON** è solo un fattore numerico



## Classificazione instabilità gleno-omerale

Acronimi che si basano:

- sulle lesioni anatomo-patologiche riscontrabili
- sulla direzione dell'instabilità
- sull'orientamento terapeutico
- sulla causa principale dell'instabilità

TUBS (96%)

AMBRII

AIOS

Thomas SC, Matsen FA. An approach to repair of avulsion of the glenohumeral instability. J Bone Joint Surg Am 1989;71:506-13.

## Classificazione instabilità gleno-omerale

### Lesioni ossee

Hill Sachs (90%)

Bony-Bankart (5-55%)

### Lesioni labbro-legamentose

Bankart (53-72%)

Perthes

ALPSA (28-47%)

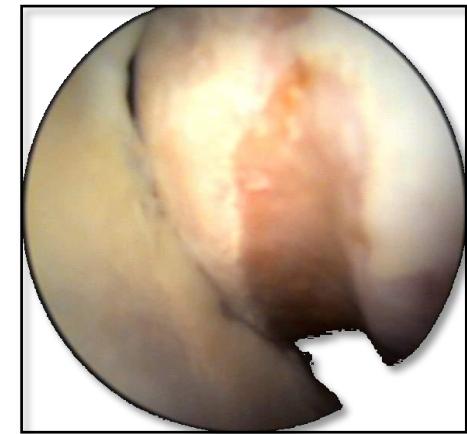
HAGL

SLAP

### Rotture capsulari

### Lesioni tendinee

## TUBS



Rowe (JBJS, 1956): 96% traumatic/ 4% atraumatic.

## Storia naturale instabilità gleno-omerale

- Rockwood (JBJS, 1992)

16% risultati positivi trattamento conservativo nei pz traumatici,  
80% atraumatici

- Bottoni (2002)

recidiva 75% conservativo / 11,1% artroscopico

- Kirkley (2005)

recidiva 47% conservativo / 15,9% artroscopico

- Cole (JBJS, 2002)

fallimento 24% trattamento artroscopico / 18% open



## Fattori prognostici

- ETA' < 20 ANNI
- IPERLASSITA' CAPSULO-LEGAMENTOSA
- TEORIA GENETICA???
- SPORT CONTATTO
- BONE LOSS GLENO-OMERALE



## Fattori prognostici

Burkhart, DeBeer

Recidiva 4% in assenza di bone loss  
significativo / 67% bone loss  
significativo (6,5% VS 87% atleti)

Bois, Fening, Polster (AJSM, 2012)

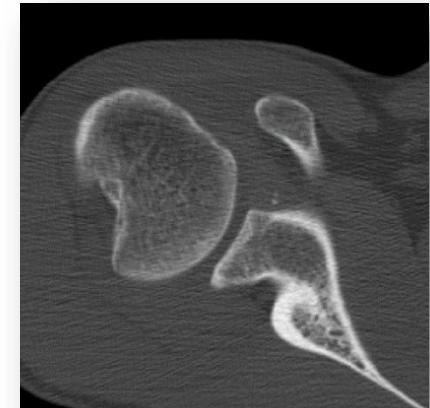
*Difetti glenoidei*

22% primo episodio / 73% instabilità  
cronica

*Hill-Sachs*

90% primo episodio / 100% instabilità  
cronica

**BONE LOSS GLENO-OMERALE**



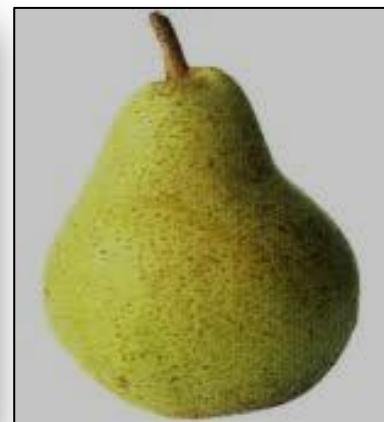
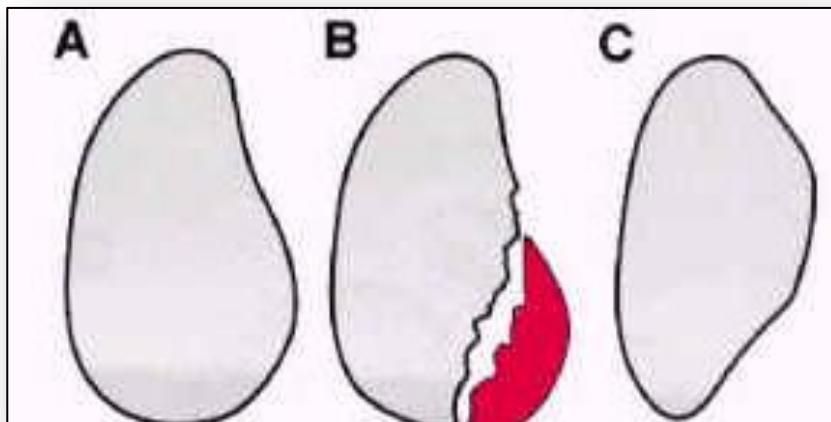
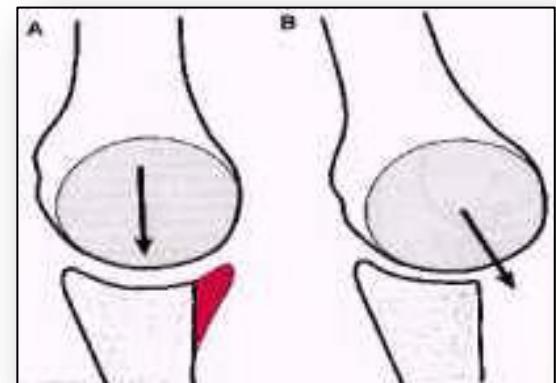
## Bone loss glenoideo

Bigliani (AJSM, 1998)

Bony Bankart

Inverted Pear

Compression Bankart



## Quantificare il bone loss glenoideo

- Bigliani (AJSM, 1998)

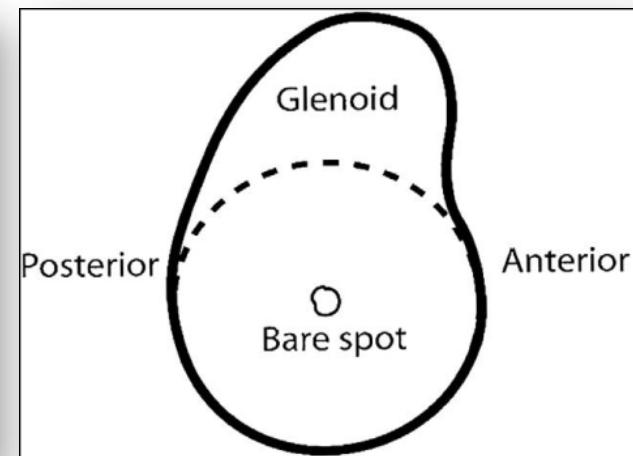
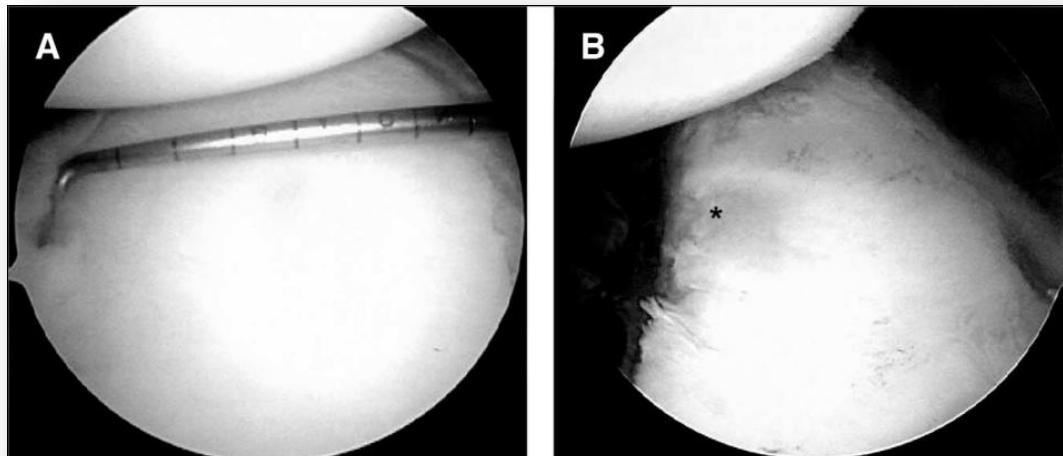
> 25%

- Itoi (JBJS, 2000)

> 21% studio biomeccanico

- Atri studi

20-25%

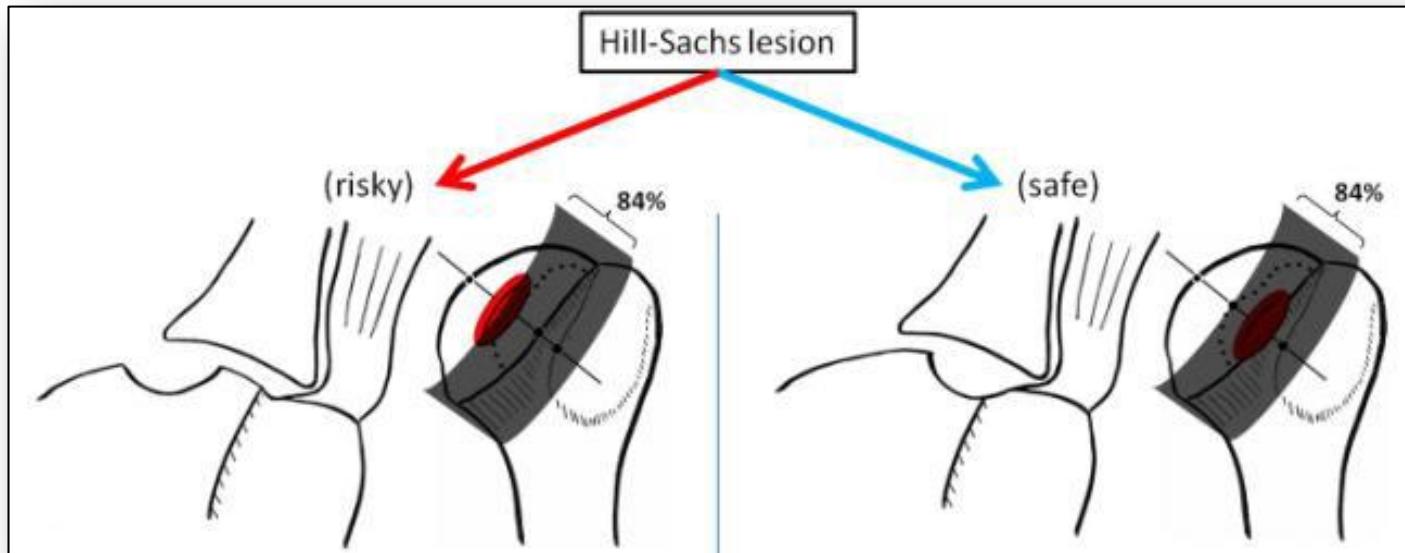


## Bone loss omerale

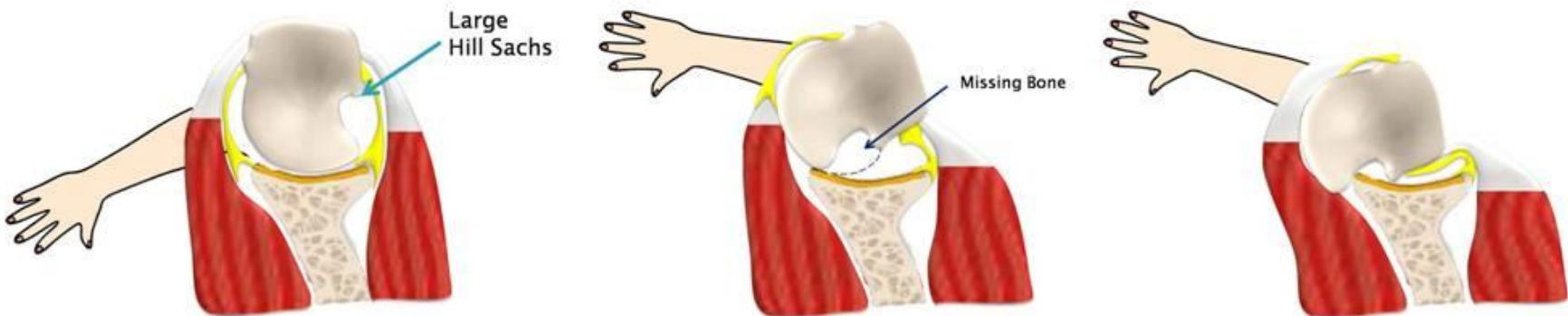
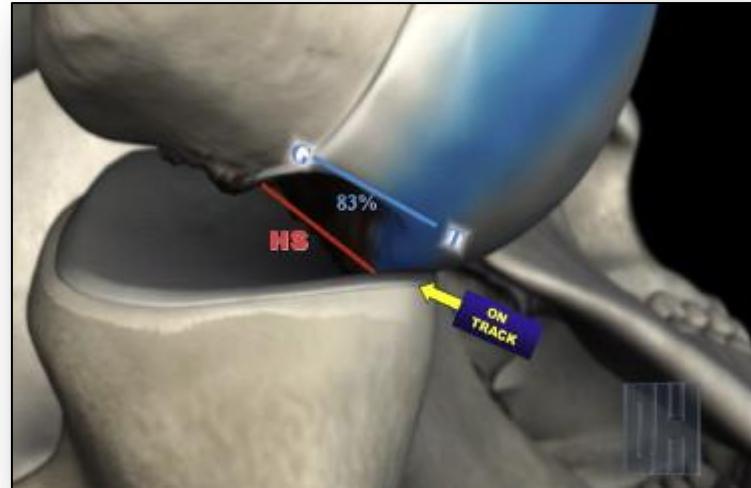
Yamamoto, Itoi (JSES, 2007)

La sede della lesione HS è più  
importante della dimensione: GLENOID  
TRACK / ENGAGING

100% instabilità recidiva se engaging HS



## Engaging Hill-Sachs





## Instability Severity Index Score

Boileau, Balg (JBJS Br, 2007)

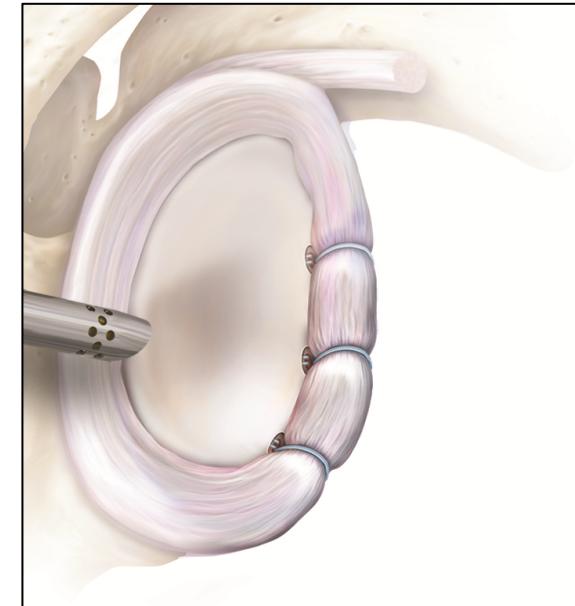
Prognostic Factors	Points
Age at Surgery	
• ≤ 20	2
• > 20	0
Level of Sport	
• Competitive	2
• Recreational	0
Type of Sport	
• Contact/forced ABER*	1
• Other	0
Clinical Exam	
• Hyperlaxity	1
• No hyperlaxity	0
AP X-ray (IR <sup>†</sup> and ER <sup>‡</sup> )	
• Hill-Sachs on ER <sup>‡</sup> view	2
• No Hill-Sachs visible	0
AP X-ray	
• Glenoid contour loss	2
• No glenoid contour loss	0

ABER = abduction and external rotation; <sup>†</sup>IR = internal rotation;

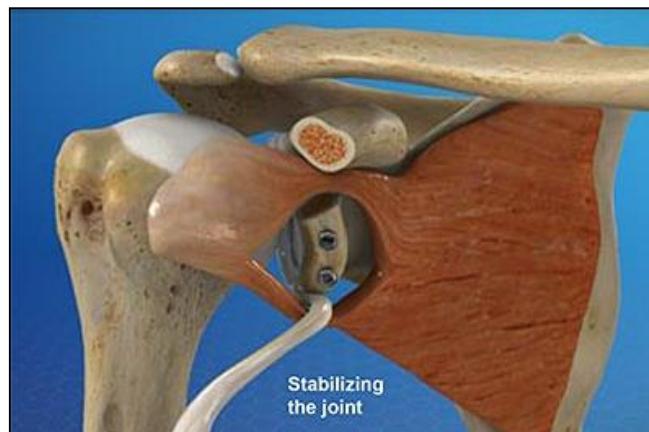
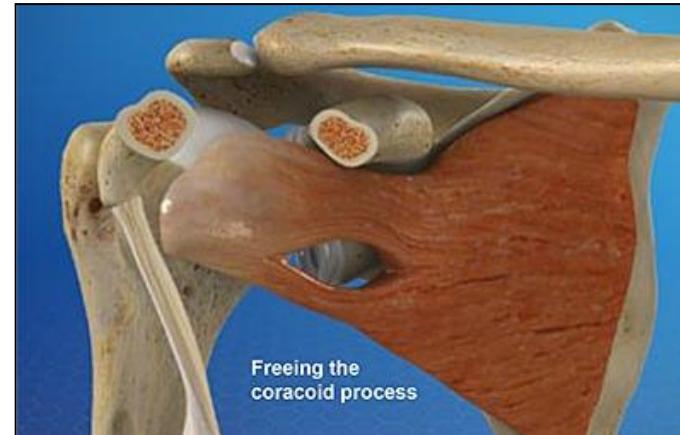
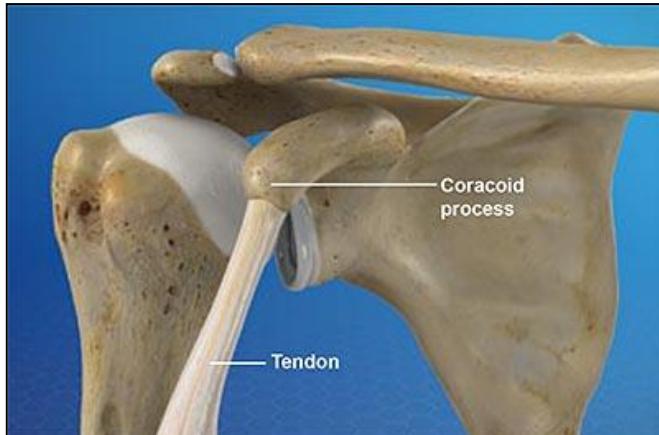
ER = external rotation

- **A score of ≤ 6 points** = an acceptable recurrence risk of 10% with **arthroscopic stabilisation**
- **A score of > 6 points** = an unacceptable recurrence risk of 70% and should be advised to undergo **open surgery** (i.e. Laterjet procedure)

## CAPSULOPLASTICA ARTROSCOPICA No bone loss



## STABILIZZAZIONE SECONDO LATARJET (open/artroscopica) Bone loss > 20-25%



# IX CONGRESSO NAZIONALE DMSA

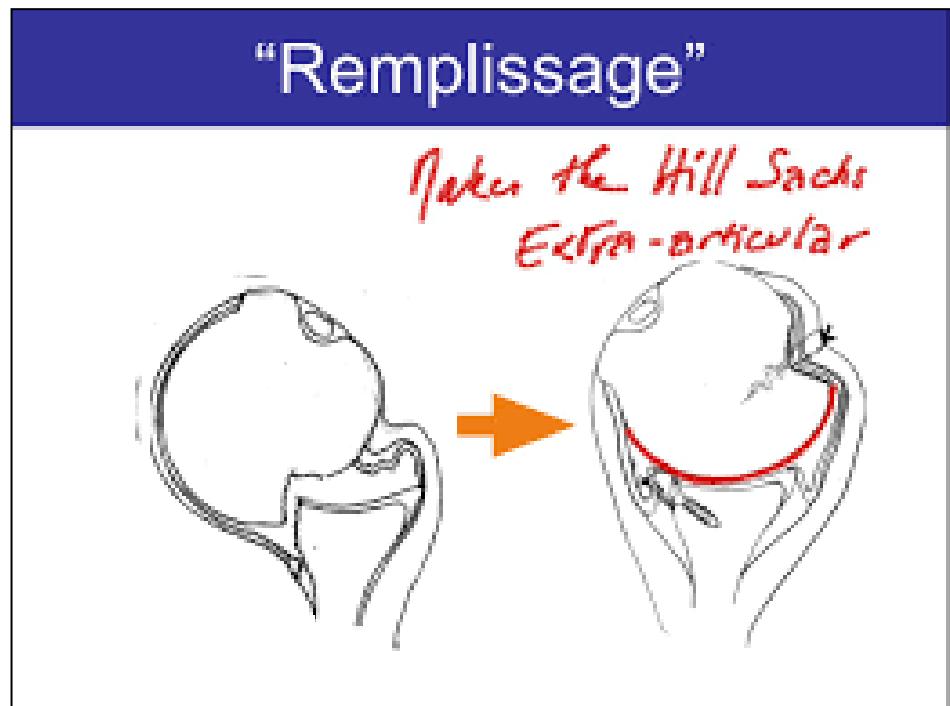
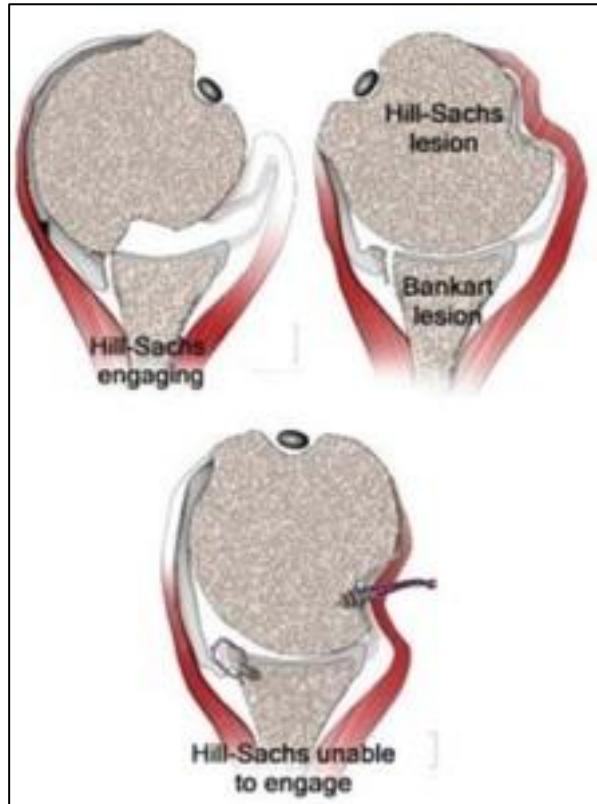
## STABILIZZAZIONE SECONDO LATARJET (open/artroscopica) Bone loss > 20-25%

	NUMBER OF PROCEDURES PERFORMED	FOLLOW-UP DURATION	REDISLOCATION RATE
ALLAIN (1998) <sup>14</sup>	95	14 years	0%
BURKHART (2007) <sup>13</sup>	102	5 years	3.9%
HOVELIUS (1983) <sup>19</sup>	112	2.5 years	6%
HOVELIUS (2004) <sup>15</sup>	118	15 years	3.4
SINGER (1995) <sup>20</sup>	14	20 years	0%
WALCH (1991) <sup>12</sup>	354	3 years	1%
WALCH (2000) <sup>7</sup>	160	3 years	1%

# IX CONGRESSO NAZIONALE DMSA

ZONA GRIGIA Bone loss < 20-25% ????

## REMPISSAGE ARTROSCOPICO ASSOCIATO ALLA CAPSULOPLASTICA



# IX CONGRESSO NAZIONALE DMSA

**ZONA GRIGIA Bone loss < 20-25% ????**



[Orthop Clin North Am](#). 1993 Jan;24(1):71-88.

## **Arthroscopic shoulder capsulorrhaphy using metal staples.**

[Detrisac DA<sup>1</sup>](#), [Johnson LL](#).

[Author information](#)

### **Abstract**

Staple capsulorrhaphy on the shoulder using a metal staple for traumatic anterior instability has the advantages of increased diagnostic accuracy, microdebridement of the pathology, accurate assessment of the glenohumeral ligament pathology, and selective repair of the ligament pathology. Although the same advantages should apply to staple capsulorrhaphy for traumatic posterior instability, our experience remains very limited. Staple capsulorrhaphy on the shoulder has multiple disadvantages, including being technically difficult with a slow learning curve, not being applicable to all unstable shoulders, an average failure rate of 12% that may be related to inadequate postoperative immobilization, no extra-articular reinforcement, and the use of a metal implant that may need to be removed at a second operation. Staple capsulorrhaphy is currently performed for traumatic anterior instability in the shoulder, with a selected repair of the pathology using a single, well-placed staple and prolonged postoperative immobilization. The design of the staple affords a simpler insertion technique than rivets, screws, and intra-articular sutures. The advent of a biodegradable staple should eliminate inherent problems of metal implants while preserving the advantages of this method.

# IX CONGRESSO NAZIONALE DMSA

# ZONA GRIGIA Bone loss < 20-25% ????

## **TECNICA ASA ASSOCIATA ALLA CAPSULOPLASTICA**



Arthroscopy, 2017 May;33(5):902-909. doi: 10.1016/j.arthro.2016.09.008. Epub 2016 Nov 19.

## **Arthroscopic Subscapularis Augmentation of Bankart Repair in Chronic Anterior Shoulder Instability With Bone Loss Less Than 25% and Capsular Deficiency: Clinical Multicenter Study.**

Maiotti M<sup>1</sup>, Massoni C<sup>2</sup>, Russo R<sup>3</sup>, Schroter S<sup>4</sup>, Zanini A<sup>5</sup>, Bianchedi D<sup>6</sup>.

## Author information

## Abstract

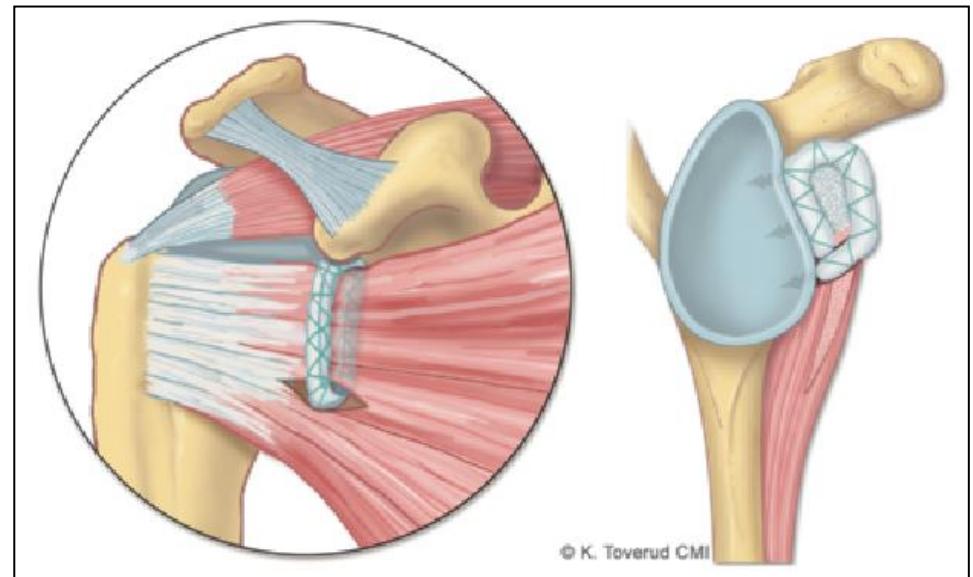
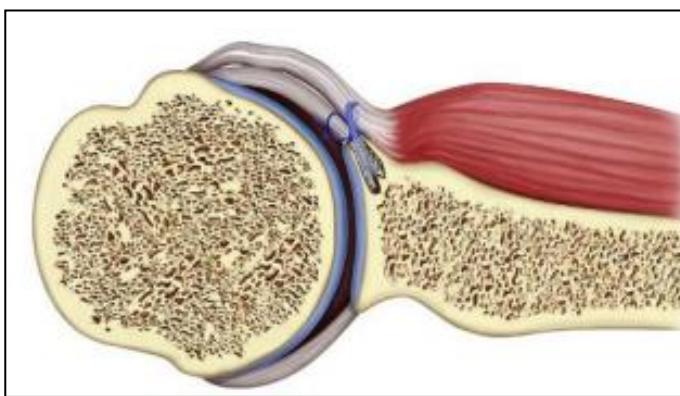
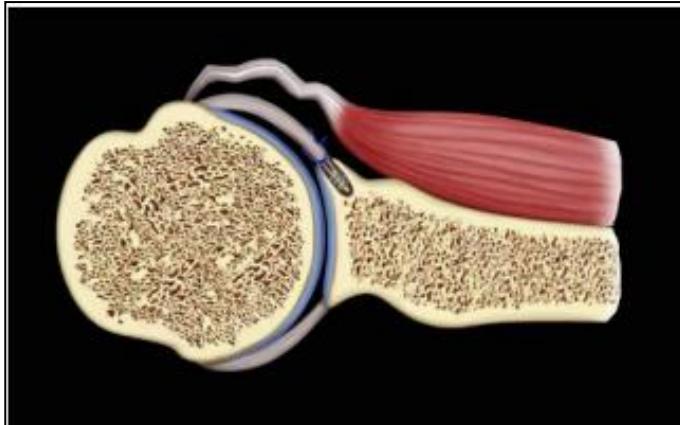
**PURPOSE:** To assess the short-term outcomes of the arthroscopic subscapularis augmentation (ASA) technique, consisting of a tenodesis of the upper third of the subscapularis tendon and a Bankart repair, and its effect on shoulder external rotation.

**METHODS:** Patients selected for this study were involved in contact sports, with a history of traumatic recurrent shoulder dislocations and a minimum of 2-year follow-up. Inclusion criteria were patients with glenoid bone loss (GBL) ranging from 5% to 25%, anterior capsular deficiency, and Hill-Sachs lesion who underwent ASA technique. Exclusion criteria were GBL >25%, multidirectional instability, preexisting osteoarthritis, and overhead sports activities. Visual analog scale (VAS) scale for pain, Rowe score, and American

# IX CONGRESSO NAZIONALE DMSA

**ZONA GRIGIA Bone loss < 20-25% ????**

**TECNICA ASA ASSOCIATA ALLA CAPSULOPLASTICA**

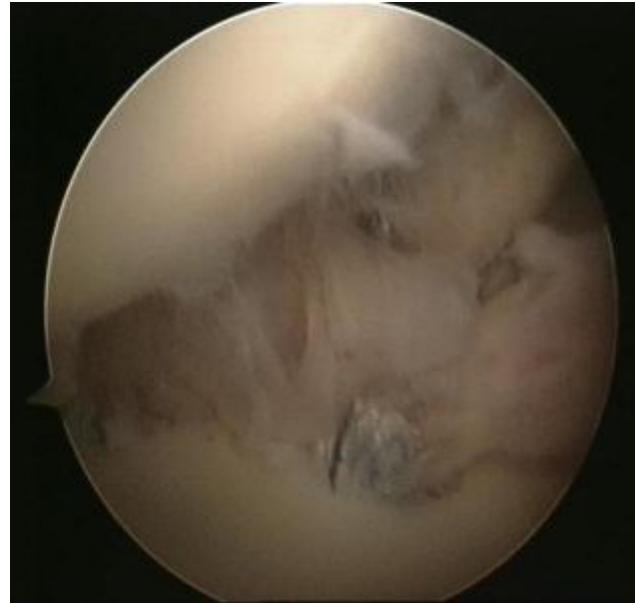
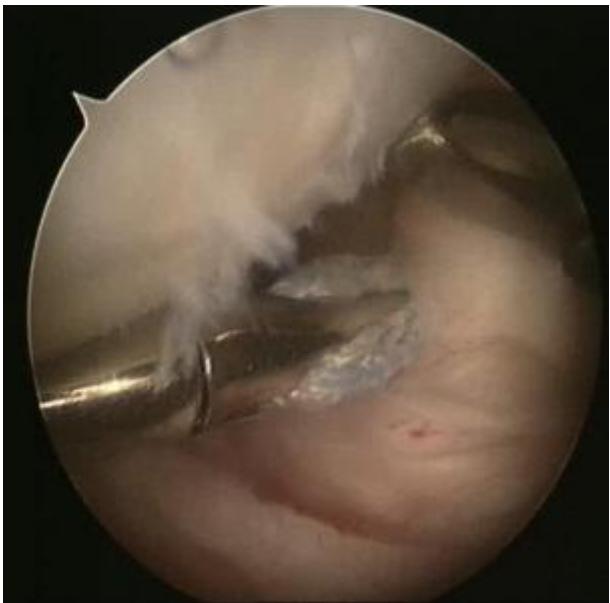


© K. Toverud CMI

# IX CONGRESSO NAZIONALE DMSA

**ZONA GRIGIA Bone loss < 20-25% ?????**

**TECNICA ASA ASSOCIATA ALLA CAPSULOPLASTICA**



# IX CONGRESSO NAZIONALE DMSA

ZNA GRIGIA Bone loss < 20-25% ????

## TECNICA ASA ASSOCIATA ALLA CAPSULOPLASTICA

*Musculoskelet Surg.*, 2017 Apr;101(1):75-83. doi: 10.1007/s12306-016-0446-8. Epub 2016 Dec 21.

### **Arthroscopic Bankart repair associated with subscapularis augmentation (ASA) versus open Latarjet to treat recurrent anterior shoulder instability with moderate glenoid bone loss: clinical comparison of two series.**

Russo R<sup>1</sup>, Della Rotonda G<sup>2</sup>, Cautiero F<sup>1</sup>, Ciccarelli M<sup>1</sup>, Maiotti M<sup>3</sup>, Massoni C<sup>3</sup>, Di Pietro F<sup>4</sup>, Zappia M<sup>5</sup>.

#### Author information

#### **Abstract**

**PURPOSE:** The treatment of chronic anterior shoulder instability with glenoid bone loss is still debated. The purpose of this study is to compare short-term results of two techniques treating chronic shoulder instability with moderate glenoid bone loss: bone block according to open Latarjet-Patte procedure and arthroscopic Bankart repair in association with subscapularis augmentation.

**METHODS:** Ninety-one patients with moderate anterior glenoid bone loss underwent from 2011 to 2015. From these patients, two groups of 20 individuals each have been selected. The groups were homogeneous in terms of age, gender, dominance and glenoid bone loss. In group A, an open Latarjet procedure has been performed, and in group B, an arthroscopic Bankart repair associated with subscapularis augmentation has been performed. The mean follow-up in group A was 21 months (20-39 months), while in group B was 20 months (15-36 months). QuickDash score, Constant and Rowe shoulder scores, were used for evaluations of results.

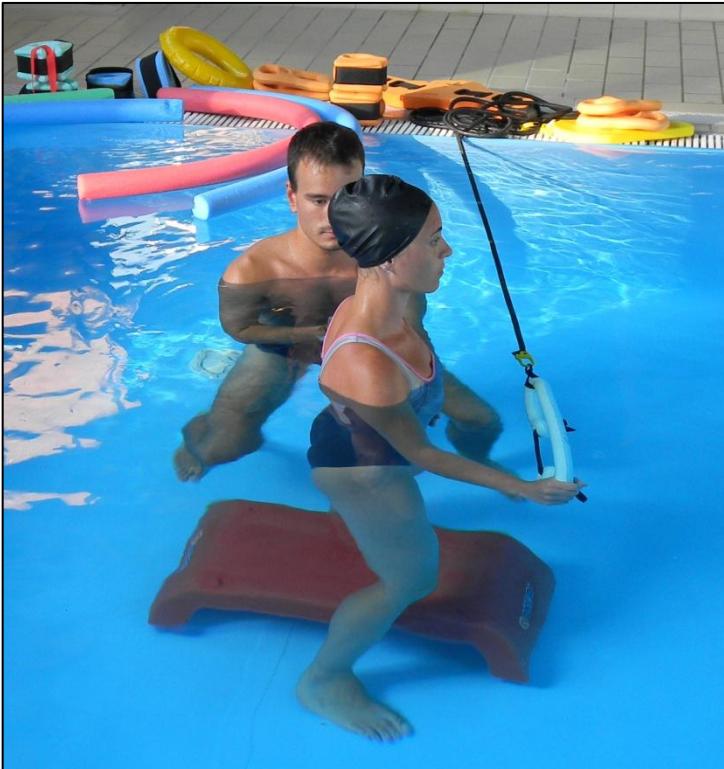
**RESULTS:** The mean preoperative rate of QuickDash score was 3.6 for group A and 4.0 for group B; Rowe Score was 50.0 for group A and 50.0 for group B. Preoperative mean Constant score was 56.2 for Latarjet-Patte and 55.2 for Bankart plus ASA. Postoperative mean QuickDash score was in group A 1.8 and 1.7 in group B; Rowe Score was 89.8 and 91.6; Constant Score was 93.3 and 93.8. No complications related to surgery have been observed for both procedures. Not statistically significant difference was reported between the two groups ( $p > .05$ ). Postoperatively, the mean deficit of external rotation in ER1 was -9° in group A and -8 in group B; In ER2, the mean deficit was -5° in both groups ( $p = .0942$ ).

**CONCLUSIONS:** Arthroscopic subscapularis augmentation of Bankart repair is an effective procedure for the treatment of recurrent anterior shoulder instability with glenoid bone loss without any significant difference in comparison with the well-known open Latarjet procedure.

# IX CONGRESSO NAZIONALE DMSA

**FISIOTERAPIA???**

**STESSI PROTOCOLLI PER TUTTI GLI INTERVENTI**



# IX CONGRESSO NAZIONALE DMSA

## IGREDIENTI PER UN BUON RISULTATO

- Indicazione corretta
- Intervento chirurgico eseguito con tecnica rigorosa e precisa
- Post/op rigoroso e preciso



# IX CONGRESSO NAZIONALE DMSA

## GRAZIE (team & school)



Abbiamo  
lasciato 1 mm  
di lasco  
mediale....

alberto.residori@gmail.com