

# Displasia Glenoidea Posterior: ¿Qué es y cómo debo tratarla?

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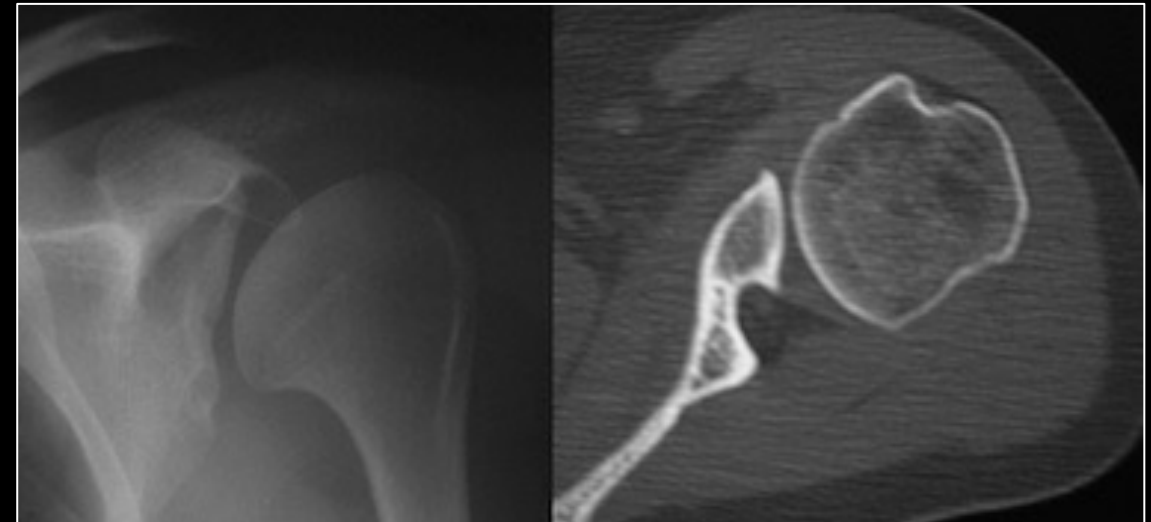
Valencia

2-6-2022

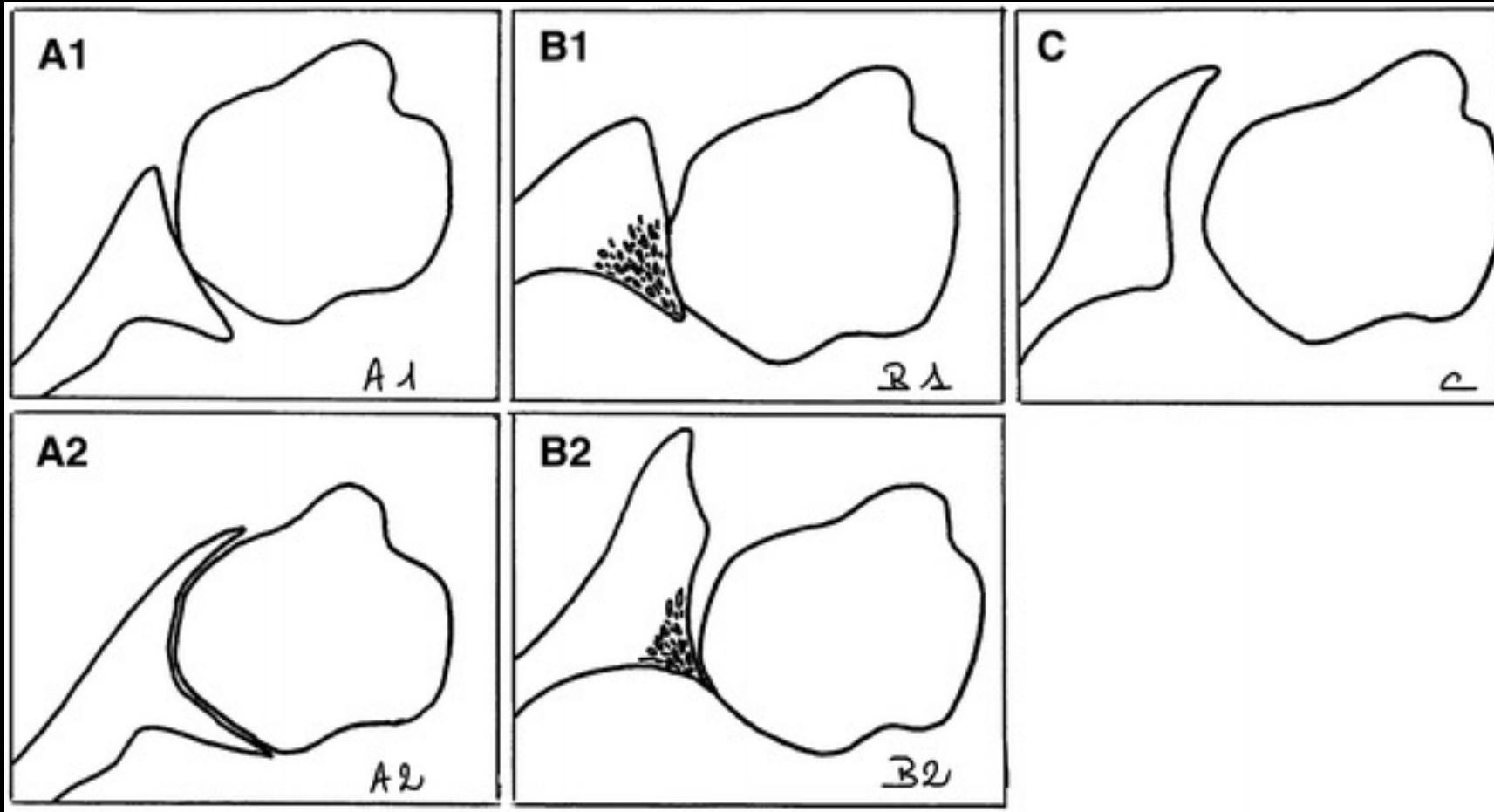


# Displasia glenoidea

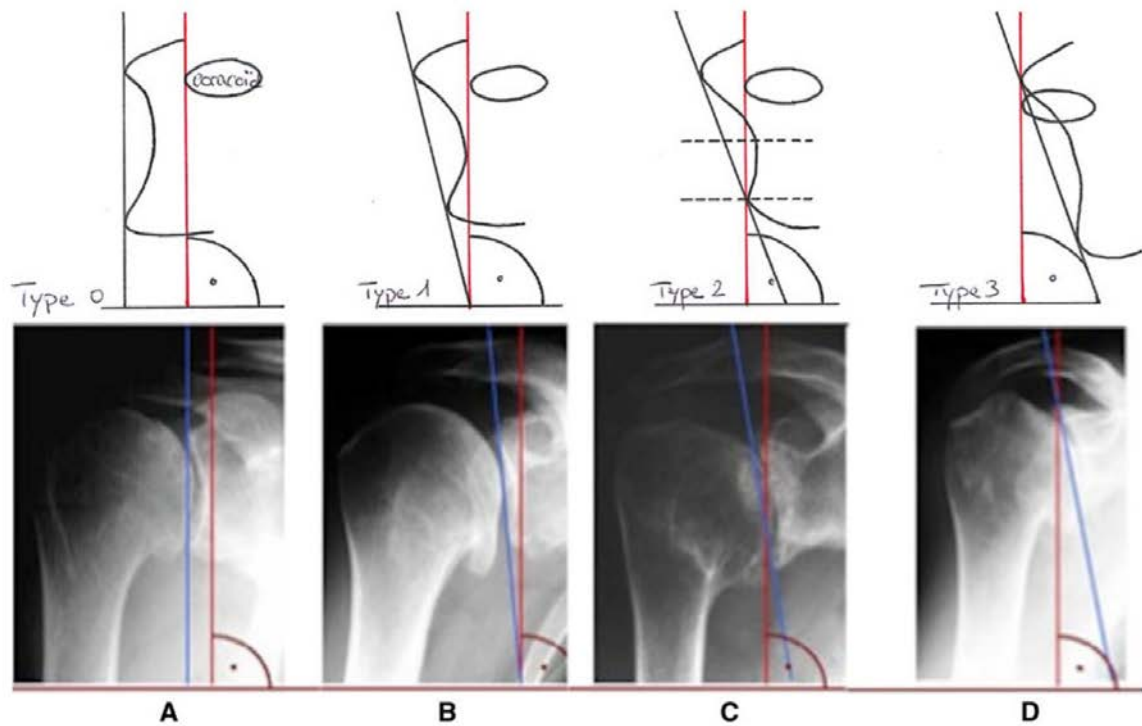
- Deficiencia ósea en la glena
- Alteración en la orientación articular: Retroversión
- Anomalías labrum y cápsula



# Clasificaciones

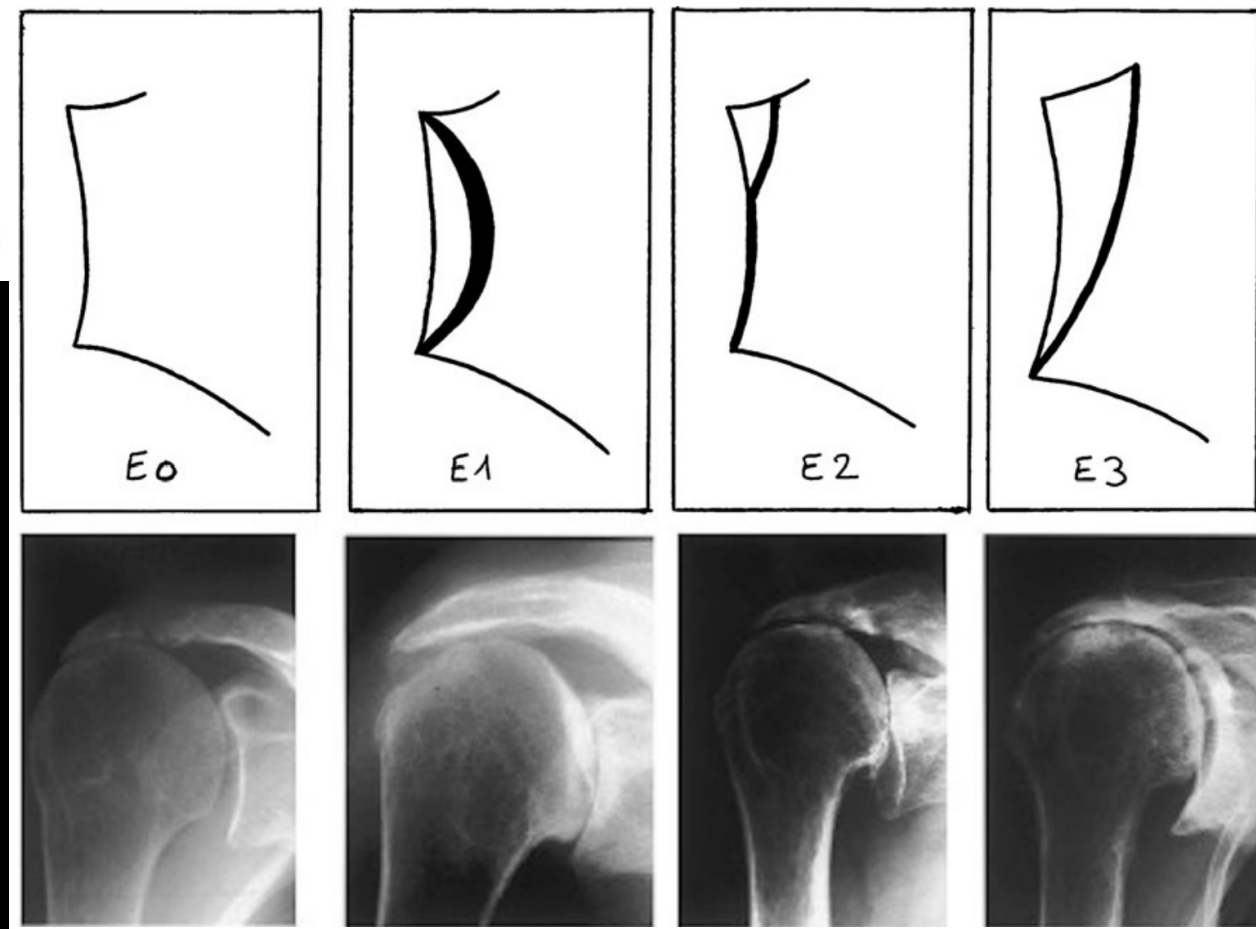


- 3 tipos de glenas de Walch

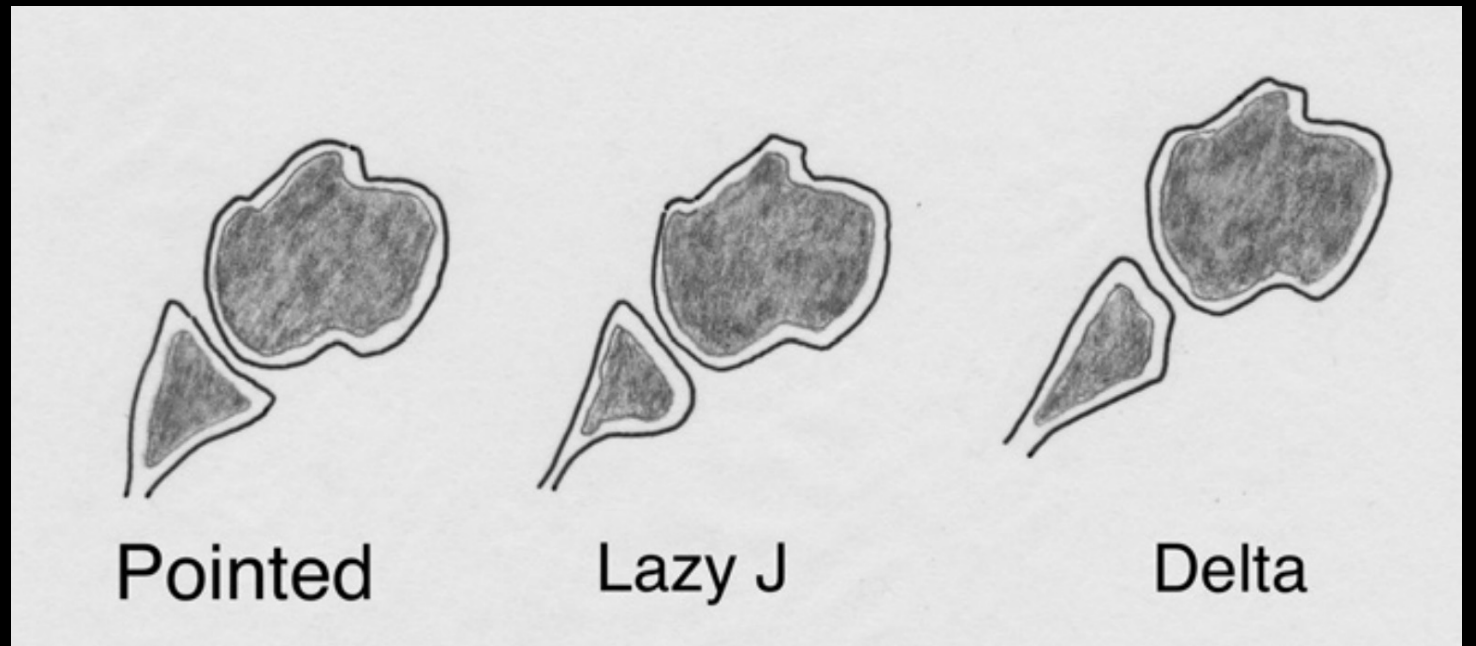


Habermeyer

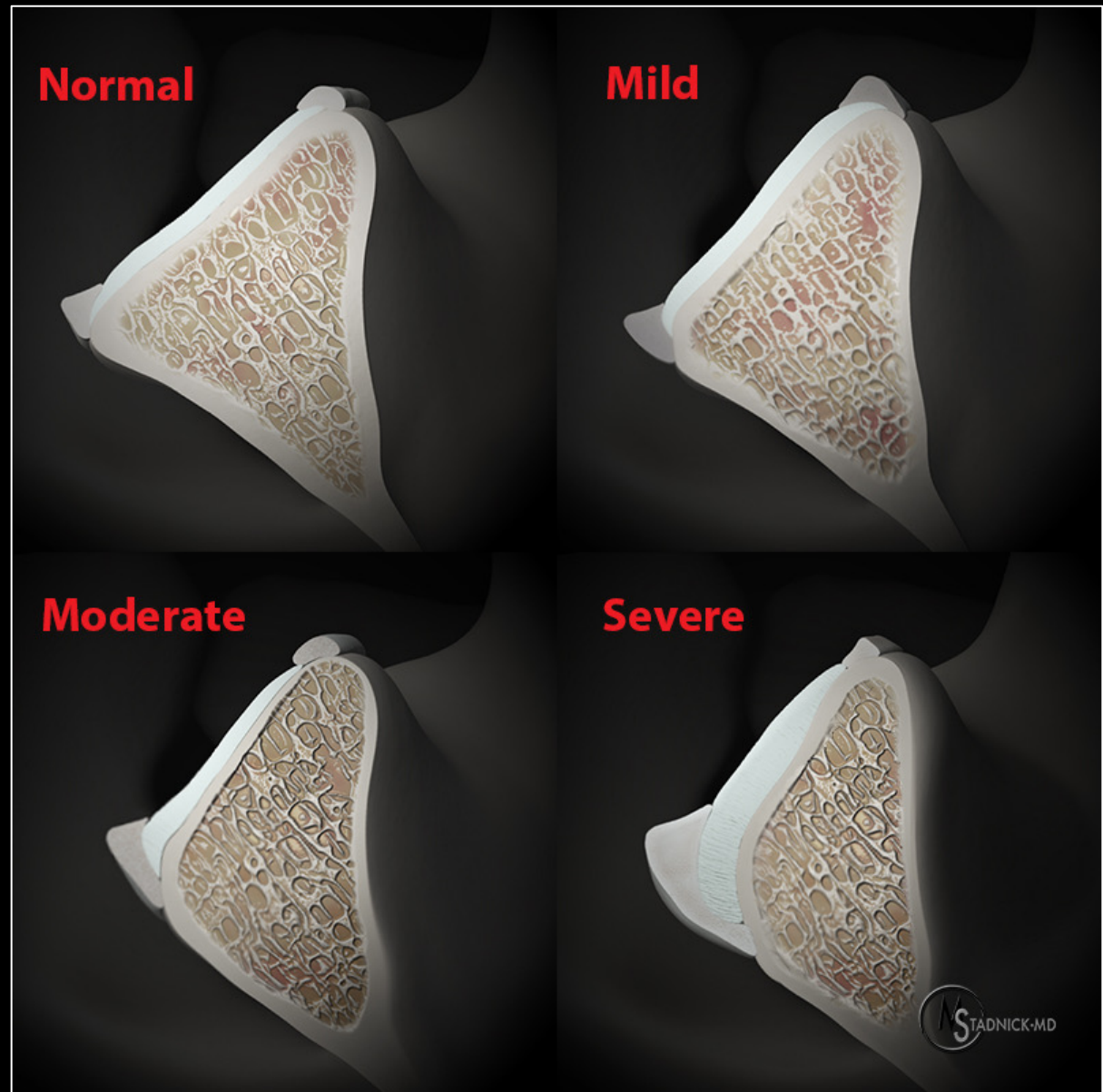
Sirveaux



- Weishaupt, Gerber. 2000  
Hipoplasia en inestabilidad recurrente postraumática
- Mayor displasia y retroversión que en cohorte



- Harper 2005
- ArthroRMN
- Hipertrofia cartílago posterior y displasia







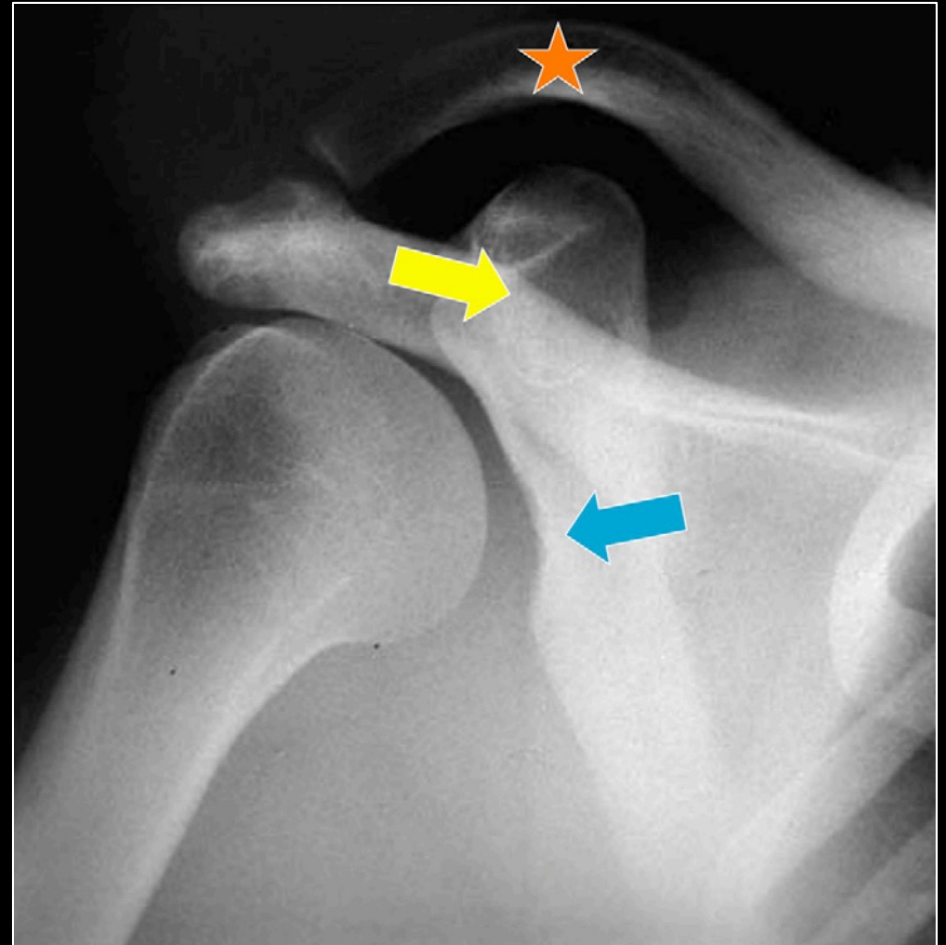
La retroversión y la  
displasia son factor  
de riesgo para  
inestabilidad  
posterior

Síguenos en Facebook

- Bradley, Owens, Hurley.....

# Rx simple

- Hipoplasia cuello escápula
- Alteración cavidad glenoidea
- Hipertrofia coracoides o acromion
- Versión (?)

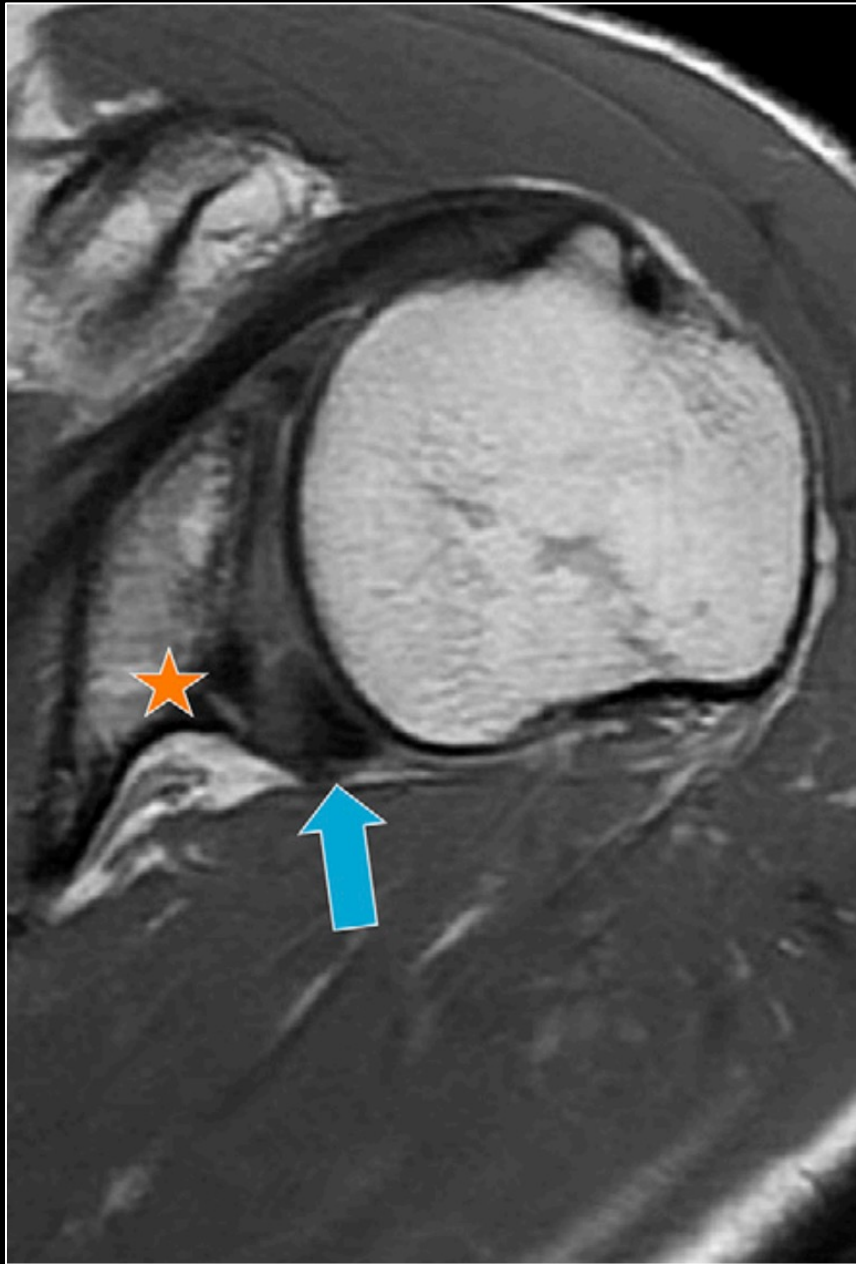




# TAC

- Displasia, hipoplasia, retroversión, subluxación humeral





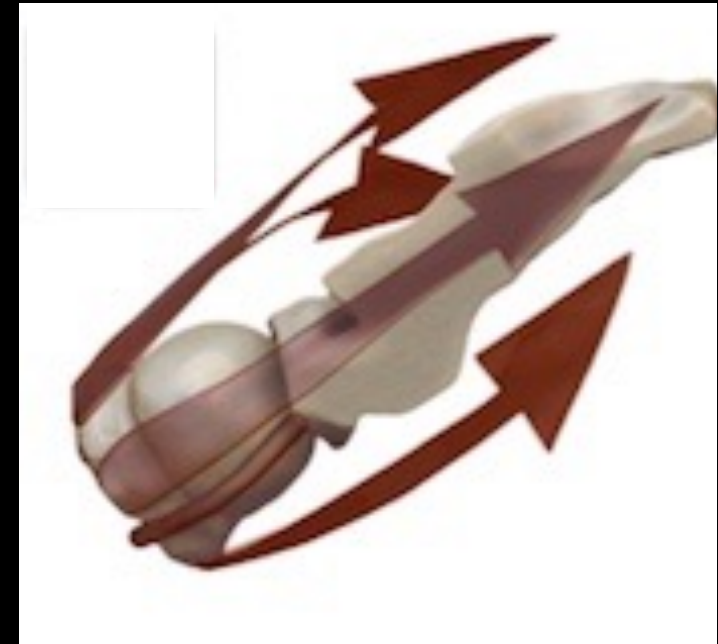
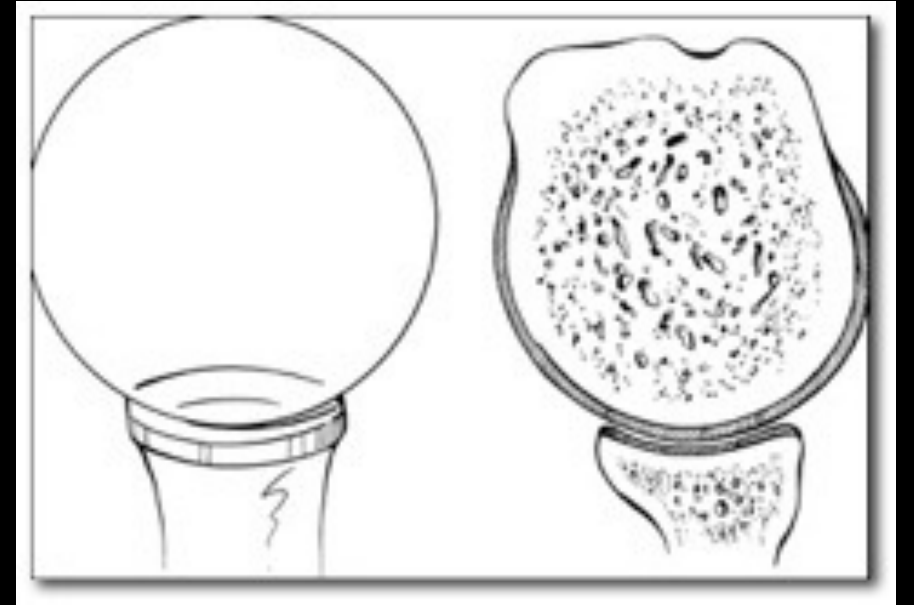
# RMN

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- Lesiones capsulares y labrales

# Tratamiento

- Ortopédico
  - Hallazgo casual asintomático
  - Sintomático: Rehabilitación
  - 50% inestabilidad posterior evitan cirugía



# Tratamiento quirúrgico

- Inestabilidad posterior **sintomática** con displasia glenoidea
- Partes blandas: labrum y cápsula
- Óseo: Reorientación (osteotomías) o Aumentación (Tope óseo)
- Abierta o artroscópica



# Partes blandas

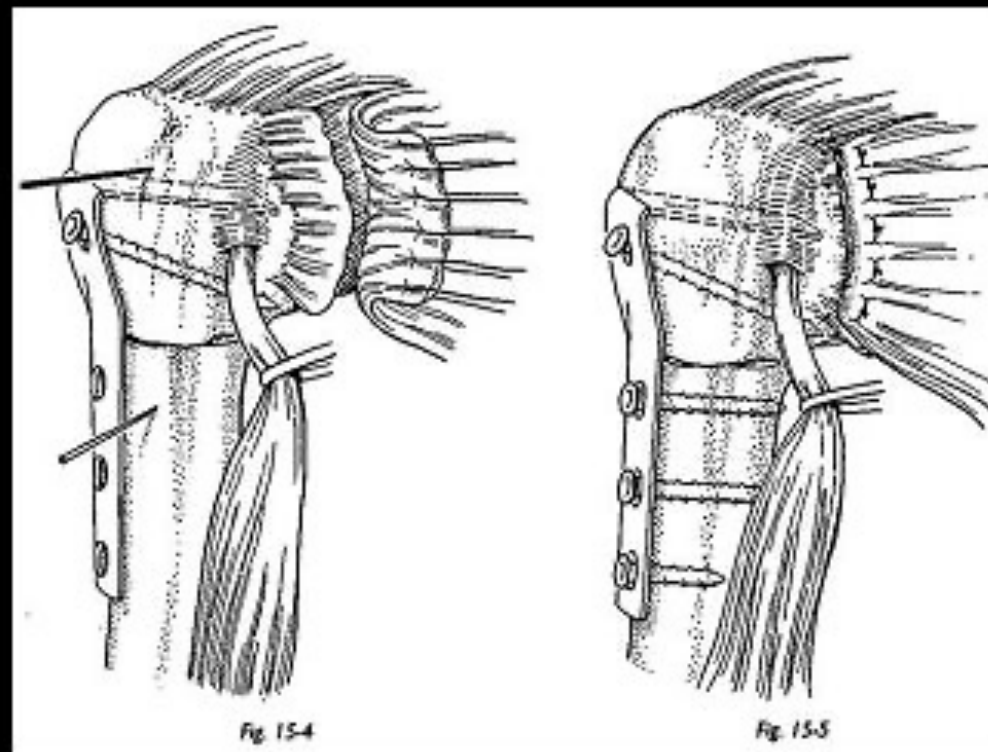
- Pocos trabajos displasia **con** partes blandas
- Sí series displasia **en** partes blandas
- Más displasia en inestabilidad
- Más recidiva si displasia
- 80% buenos resultados
- 10º-15º valor crítico

Hurley, Fuchs, Bigliani, Bradley,...





# Osteotomías húmero



Case Reports > J Bone Joint Surg Am. 1990 Feb;72(2):181-6.

## Rotational osteotomy of the humerus for posterior instability of the shoulder

V Surin<sup>1</sup>, S Blåder, G Markhede, K Sundholm

> J Bone Joint Surg Br. 1995 Nov;77(6):924-7.

## Rotation osteotomy of the proximal humerus to stabilise the shoulder. Five years' experience

M Kronberg<sup>1</sup>, L A Broström

Los 90





# Osteotomías glena

- Osteotomías apertura posterior
- Riesgos: Fracturas intraarticulares, migración injerto, hipocorrección, hipercorrección
- Series antiguas sin TAC o RMN

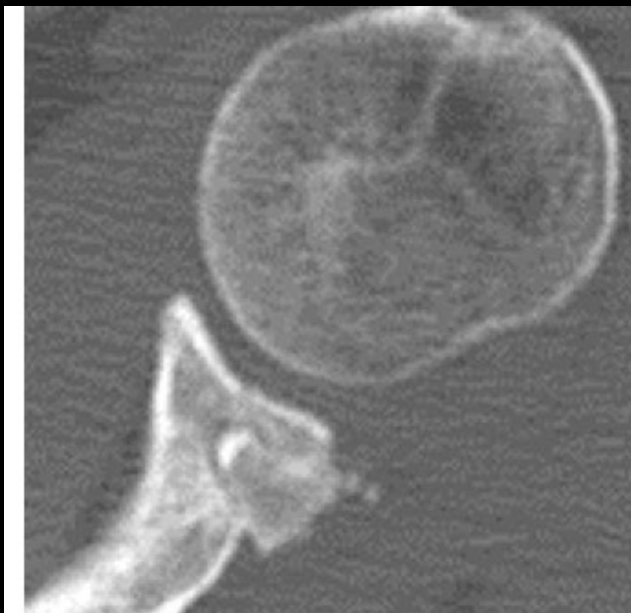
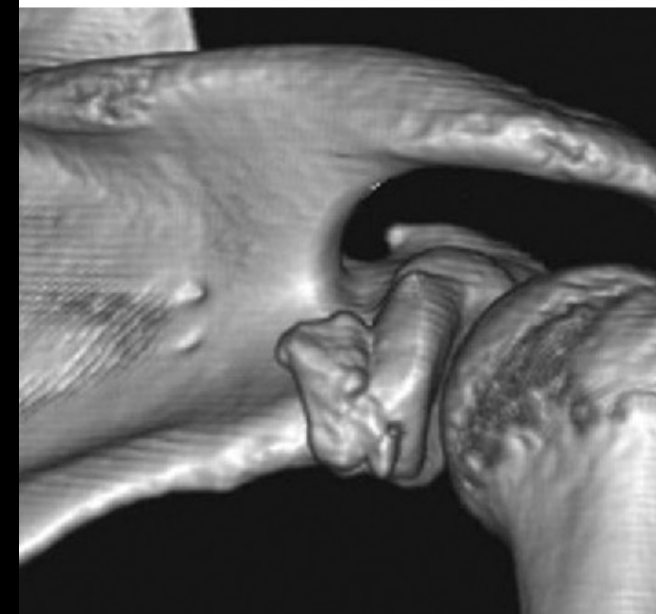


Fig. 3a

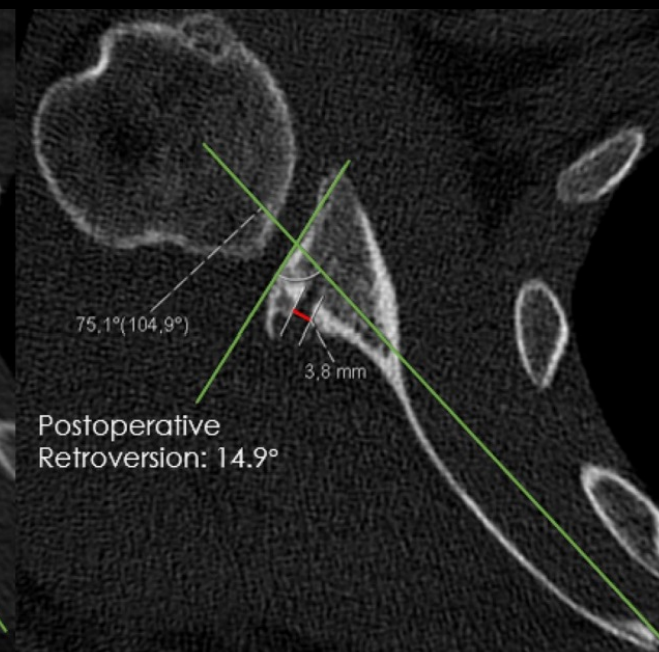
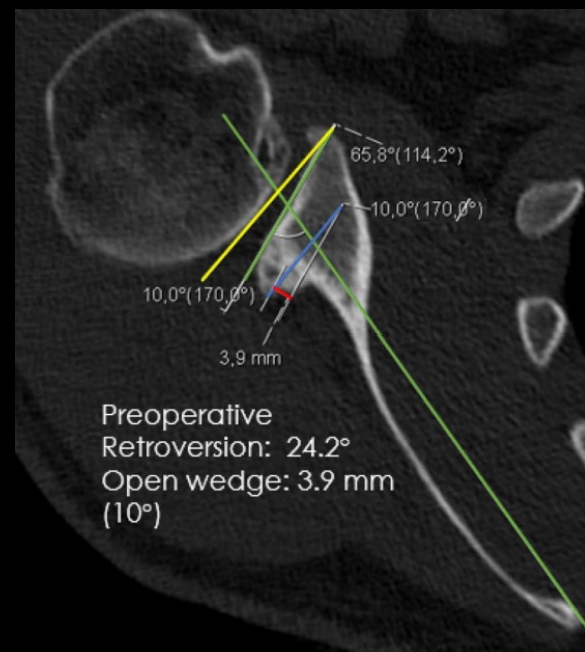
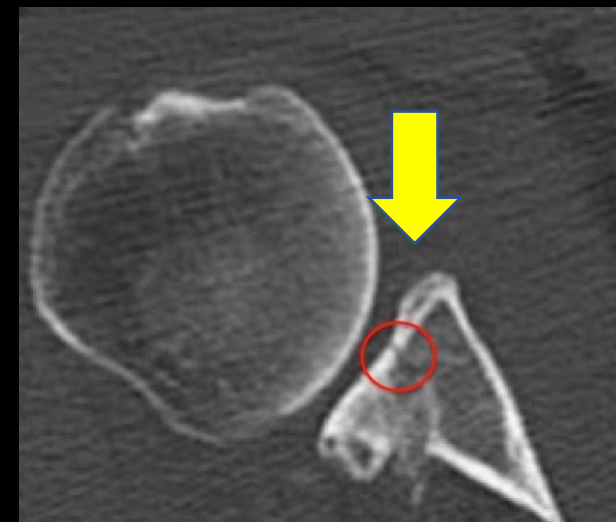


# Posterior open wedge glenoid osteotomy provides reliable results in young patients with increased glenoid retroversion and posterior shoulder instability

KSSTA 2019

Lucca Lacheta<sup>1</sup> · Taran S. P. Singh<sup>2</sup> · Jean M. Hovsepian<sup>1</sup> · Sepp Braun<sup>1,3</sup> · Andreas B. Imhoff<sup>1</sup> · Jonas Pogorzelski<sup>1</sup>

- 12 hombros
- Osteotomía cuña (injerto espina)
- 19 meses (14-36)
- De 23° a 13°
- 90% Buenos resultados
- 33% Fracturas intraoperatorias
- **Selección pacientes y experiencia cirujano**

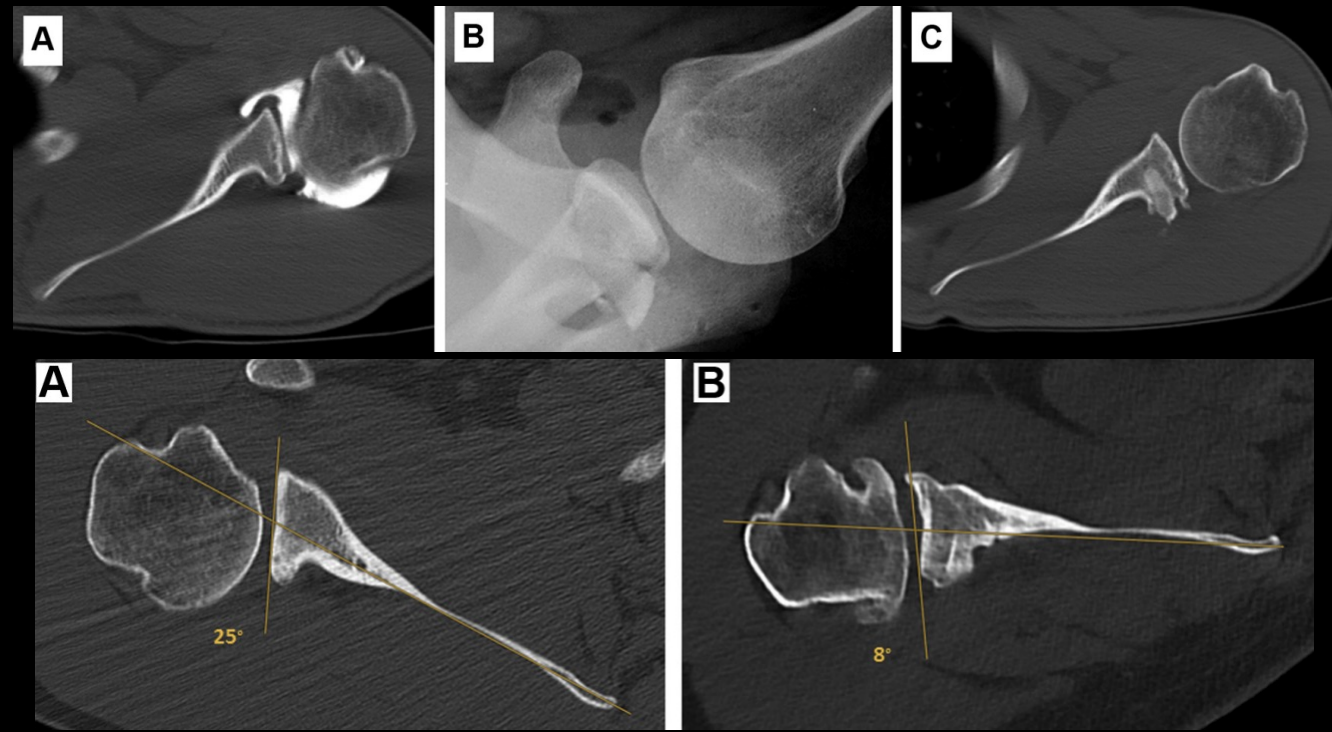


Long-term results after posterior open glenoid wedge osteotomy for posterior shoulder instability associated with excessive glenoid retroversion

JBJS 2021

Manuel Waltenspül, MD\*, Thomas Häller, MD, Lukas Ernstbrunner, MD, PhD, Sabine Wyss, RN, Karl Wieser, MD, Christian Gerber, MD

- 7 hombros
- 1 excelente, 3 buenos, 3 malos
- 6 recidivas (86%)
- No mejor Constant ni dolor
- 5 progresan a artrosis



Osteotomía en cuña posterior no devuelve la estabilidad, no recentra el húmero, no frena la artrosis. Hay que buscar tratamientos alternativos

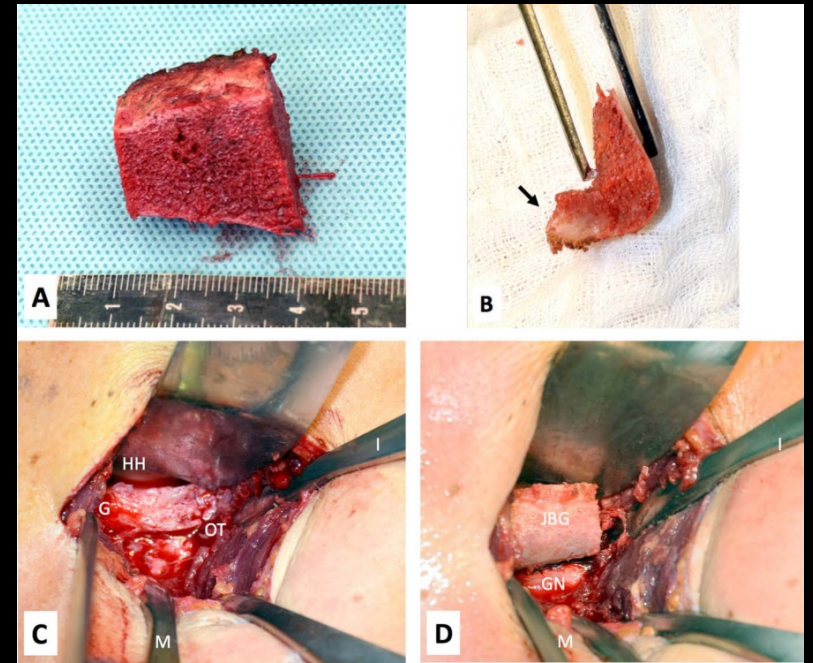
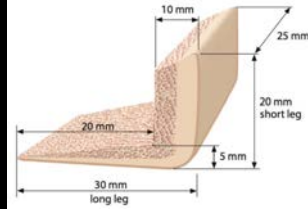


**Posterior Open-wedge Osteotomy and Glenoid Concavity Reconstruction Using an Implant-free, J-shaped Iliac Crest Bone Graft in Atraumatic Posterior Instability with Pathologic Glenoid Retroversion and Dysplasia: A Preliminary Report**

2021

Lukas Ernstbrunner MD, PhD<sup>1</sup>, Thomas Haller MD<sup>1</sup>, Manuel Waltenspul MD<sup>1</sup>, Karl Wieser MD<sup>1</sup>, Christian Gerber MD<sup>1</sup>

Clinical Orthopaedics and Related Research<sup>®</sup>  
A Publication of The Association of Bone and Joint Surgeons<sup>®</sup>

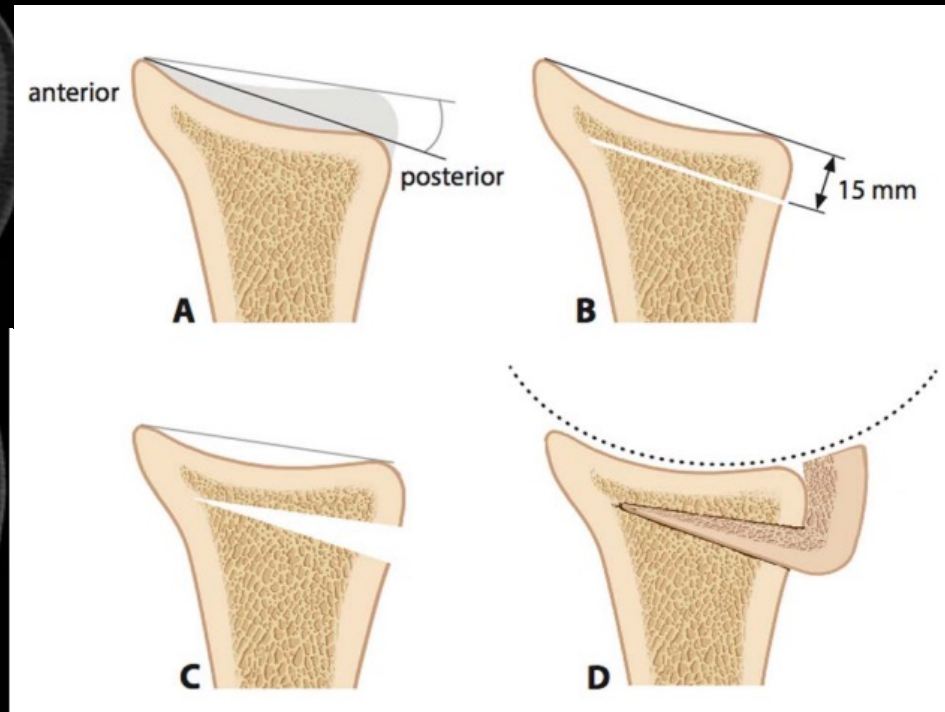
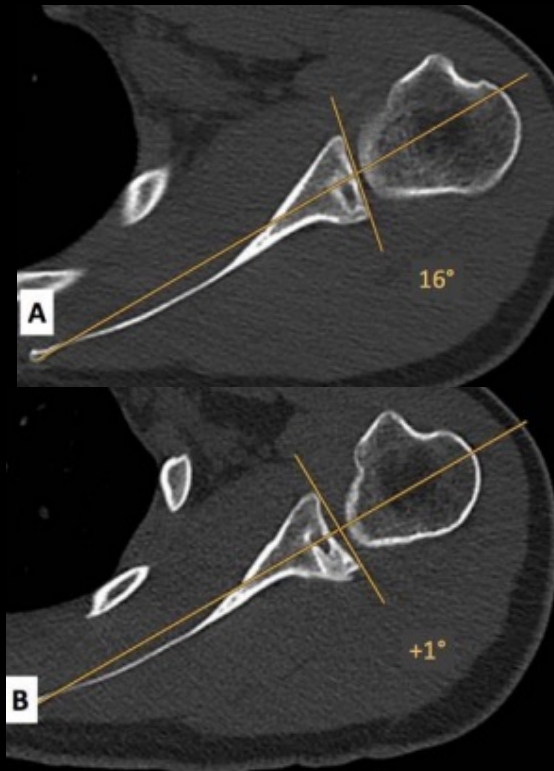


- 7 hombros > 15°
- 2 años

• Triple efecto:

Concavidad, Tamaño y Versi3n

- Resultados satisfactorios
- 4/7 aprehensi3n



# **CORR Insights®: Posterior Open-wedge Osteotomy and Glenoid Concavity Reconstruction Using an Implant-free, J-shaped Iliac Crest Bone Graft in Atraumatic Posterior Instability with Pathologic Glenoid Retroversion and Dysplasia: A Preliminary Report**

Betsy McAllister Nolan MD<sup>1</sup>

- Pocos casos
- Poco tiempo
- 4/7 aprehensión, algunos dolor
- Cirujano muy muy experto: Gerber

**Inestabilidad posterior con displasia es un problema no resuelto en la cirugía del hombro**

# Aumentación: Injerto óseo

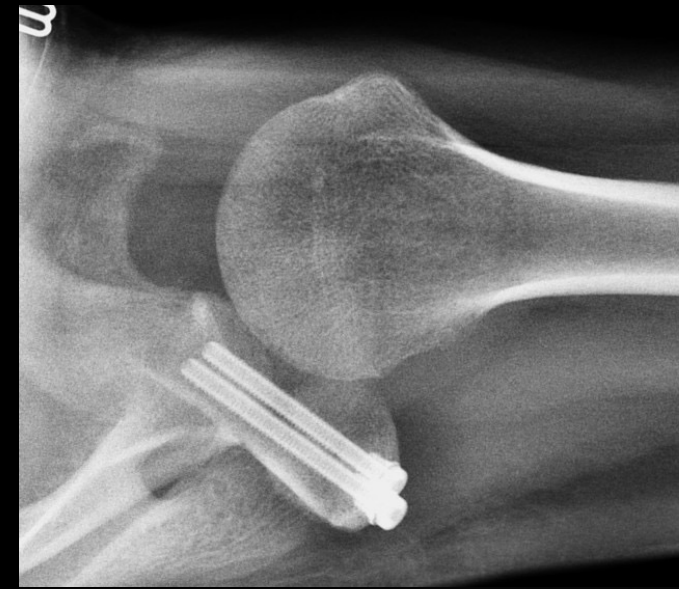
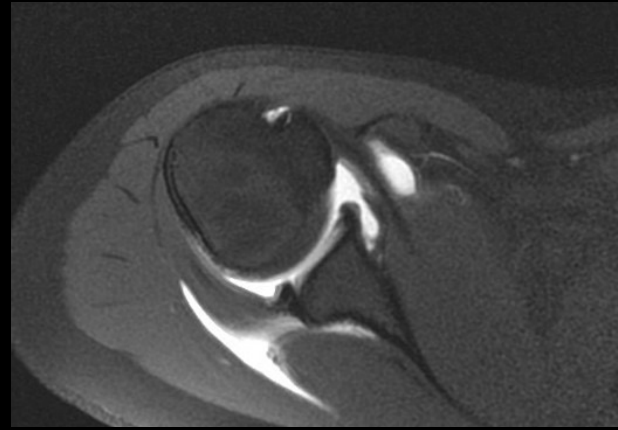
- Cresta, Espina, Acromion, Costilla, Clavícula, Alo tibia distal
- Técnicas incongruentes: Tope óseo lateralizado
- Técnicas congruentes





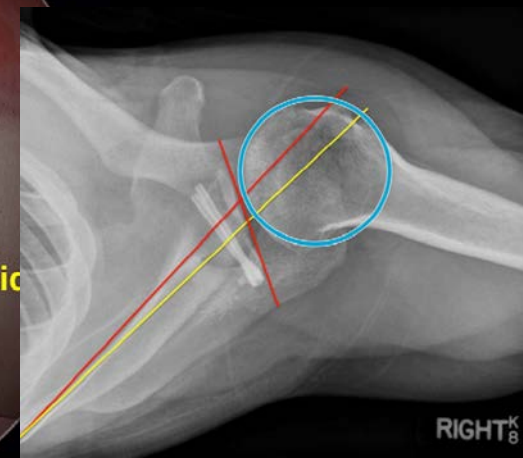
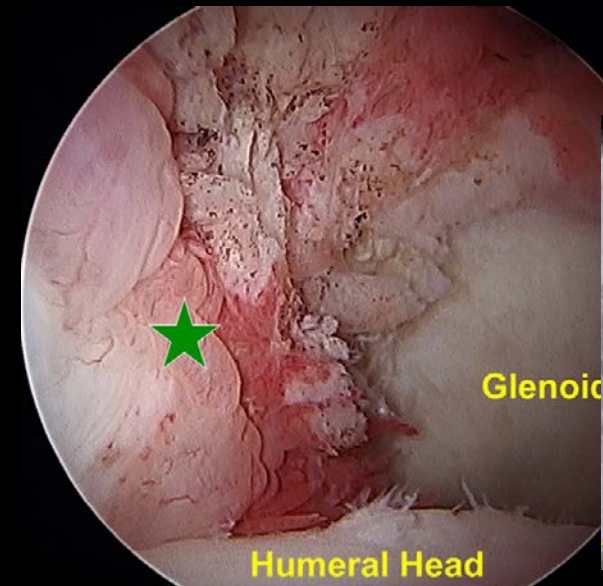
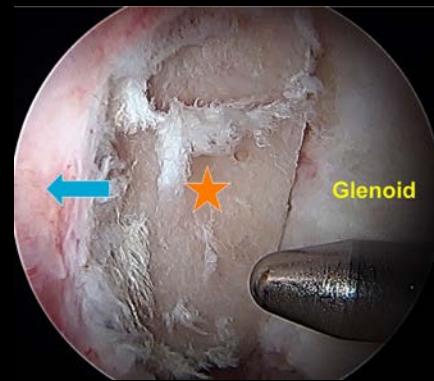
# Tope óseo lateralizado

- Técnica incongruente
- Injerto lateral: verdadero tope óseo
- Buen resultado a corto plazo
- Alta tasa artrosis



# Injerto congruente

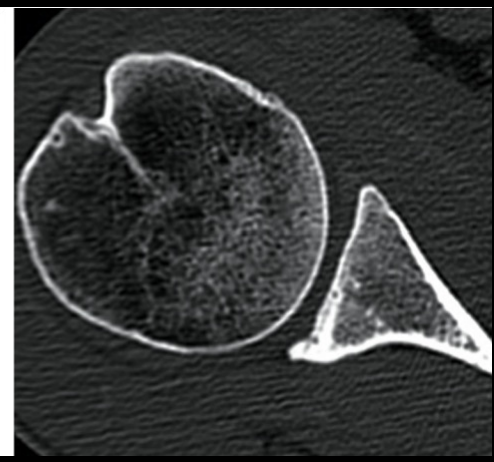
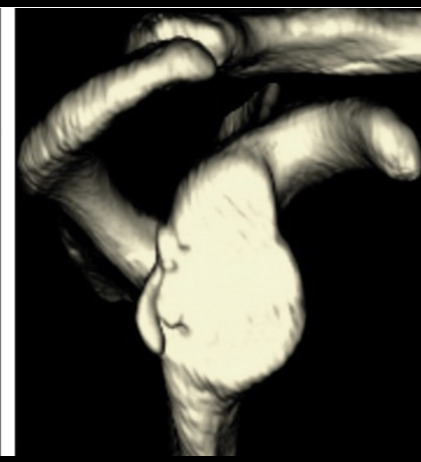
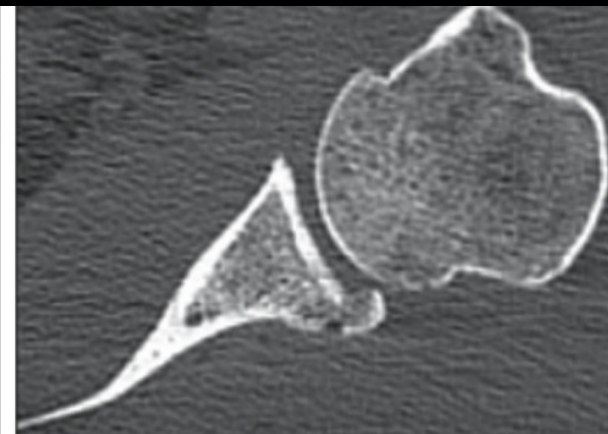
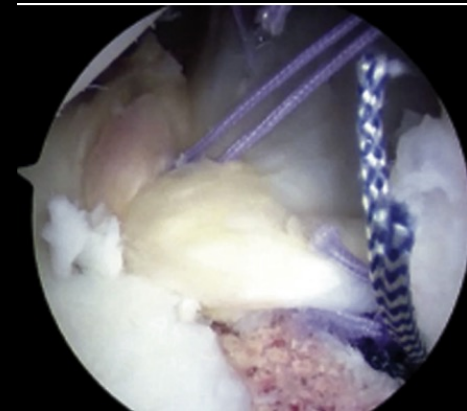
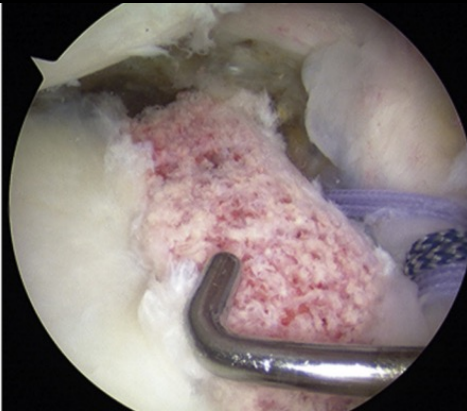
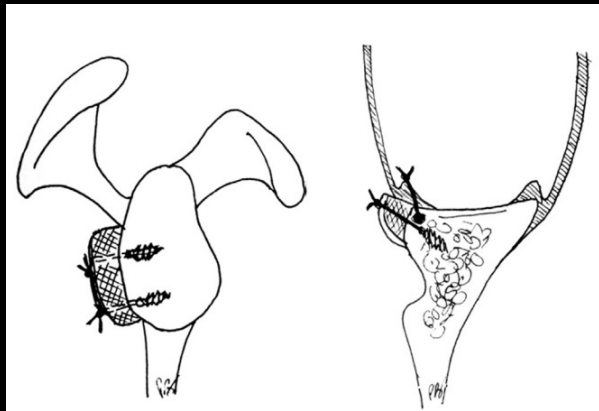
- Injerto “a ras” de la glena
- Reconstrucción de partes blandas sobre glena nativa: extraarticular
- Artroscópico: control posición, otras lesiones, menos invasivo....



# Arthroscopic Posterior Bone Block Procedure: A New Technique Using Suture Anchor Fixation

Arthroscopic  
Techniques 2013

Pascal Boileau, M.D., Marie-Béatrice Hardy, M.D., Walter B. McClelland Jr., M.D., Charles-Edouard Thélu, M.D., and Daniel G. Schwartz, M.D.



2 meses

20 meses

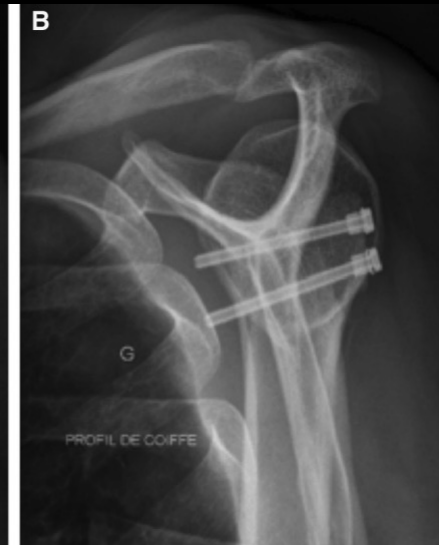
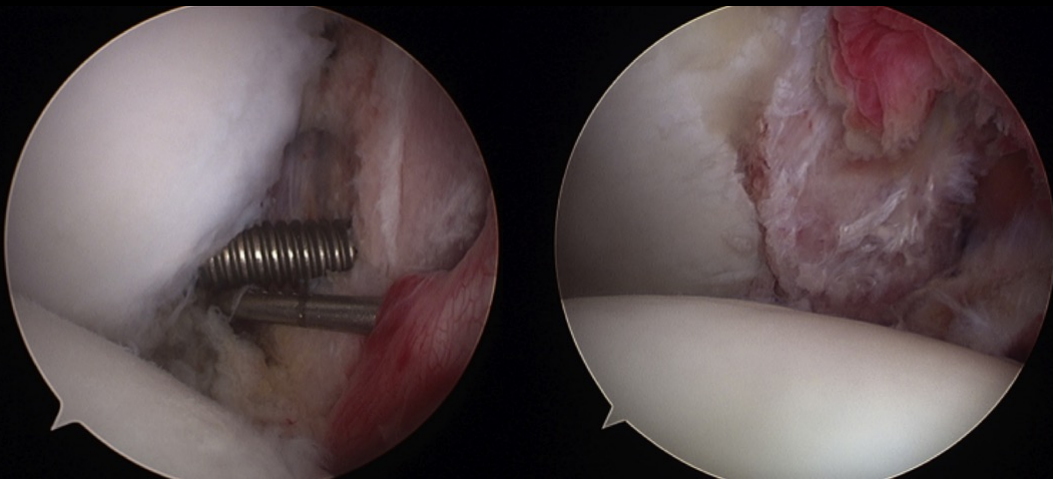


# Arthroscopic posterior bone block augmentation in posterior shoulder instability

JSES 2013

Daniel Grant Schwartz, MD<sup>a,\*</sup>, Sven Goebel, MD, FRACS<sup>b</sup>,  
Kalman Piper, MBBS, FRACS(Orth)<sup>c</sup>, Bartłomiej Kordasiewicz, MD<sup>a</sup>,  
Simon Boyle, MSc, FRCS(Tr&Orth)<sup>d</sup>, Laurent Lafosse, MD<sup>a</sup>

- 19 casos (3 displasias)
- 7 revisiones (emo)
- Sólo partes blandas si 1 luxación sin afectación ósea





## CURRENT CONCEPTS REVIEW

# Glenoid Dysplasia

JBJS 2016

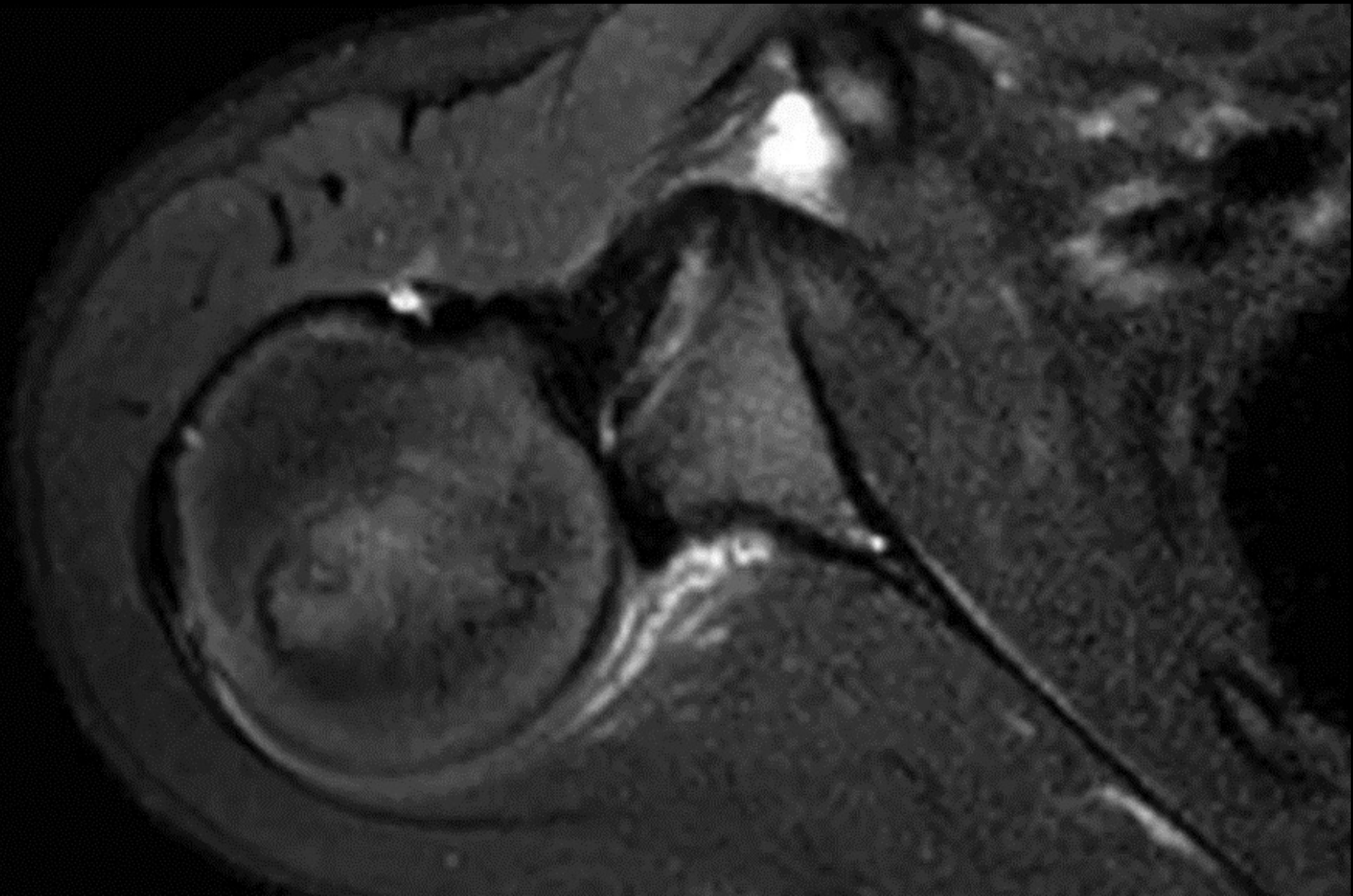
### Pathophysiology, Diagnosis, and Management

LTC Josef K. Eichinger, MD, MAJ Joseph W. Galvin, DO, LTC Jason A. Grassbaugh, MD, MAJ Stephen A. Parada, MD, and Xinning Li, MD



- Displasia leve: frecuente y predispone a inestabilidad posterior
- Displasia severa: poco frecuente
- Osteotomías en cuña: resultados variables y complicaciones
- Injertos congruentes: buena alternativa
- Problema por resolver

TABLE 1: Outcomes of Posterior Bone-Block Procedures for the Management of Posterior Glenoid Dysplasia										TABLE 1 (continued)			
Study*	Technique†	Dist Type‡	No. of Patients	Patient Types§	Length of Follow-Up¶	Reversal/Retreat‡	Adverse Events	Complications	Outcomes¶	Outcomes¶			
Rothen et al. (2015)	Open PRR, bilateral	CRG	25	Trauma (22)	6		Constant pain of 6/10 in 15 patients	Stiffness in 17 patients	3 failures; 10 with bone loss	Assessed whether dist and glenoid bone loss			
Rothen et al. (2015)	Open PRR, bilateral	CRG	15	NA	18 patients		Pain progress results and increased size of glenohumeral joint	Four patients had increased size of glenohumeral joint	No patient with glenoid dysplasia	No patient with glenoid dysplasia			
Rothen et al. (2015)	Open PRR, unilateral	CRG	9	NA	6.2	NA	None	None	None	None			
Rothen et al. (2015)	Open PRR, unilateral with neckline	CRG	9	Trauma (9)	NA		Pain and instability during work	None	None	None			
Rothen et al. (2015)	Open PRR, unilateral with neckline	CRG	9	Trauma (9)	NA		Blood cultures and instability	None	None	None			
Eichinger et al. (2016)	Open PRR, bilateral	CRG	6	Trauma (5), MDR (1)	3	NA	None	None	None	None			
Grassbaugh et al. (2016)	Open PRR, Group 1 and anterior Group 2	CRG Group 1 and anterior Group 2	18 (8 in Group 1 and 10 in Group 2)	Instability patients including 10 in Group 1 and 8 in Group 2	1.9 Group 1; 1.5 Group 2	NA	None	None	None	None			
Grassbaugh et al. (2016)	Open PRR, congruent	CRG	9	Instability patients including 9 in Group 1 and 0 in Group 2	1.5	NA	None	None	None	None			
Grassbaugh et al. (2016)	Open PRR, congruent	CRG	9	Instability patients including 9 in Group 1 and 0 in Group 2	2.4	NA	None	None	None	None			
Grassbaugh et al. (2016)	Minimally Invasive PRR	CRG	18 (10 anterior)	Trauma (15), instability (3), other (2)	1.7	NA	None	None	None	None			
Algin et al. (2017)	Open PRR, bilateral	CRG	9	Trauma (7) and MDR (2)	NA	NA	None	None	None	None			
Harvey et al. (2018)	Distal osteotomy	Anterior	8	Trauma (7) and MDR (1)	3	NA	None	None	None	None			
Harvey et al. (2018)	Distal osteotomy	CRG	10 (12 anterior)	Wrist trauma and generalized instability	8 months	NA	None	None	None	None			
Harvey et al. (2018)	Distal osteotomy	CRG and anterior	13	Wrist trauma and generalized instability	8	NA	None	None	None	None			
Harvey et al. (2018)	Distal osteotomy	NA	17	NA	NA	NA	None	None	None	None			
Harvey et al. (2018)	Distal osteotomy	NA	18	Trauma (18); no patient had wrist pathology or generalized instability	6	NA	None	None	None	None			





# Prótesis

- En artrosis
- Anatómica con fresado asimétrico
- Anatómica con injerto
- Hemi
- Inversa





*\*Take  
home message*

# Gracias

- TAC o artroRMN en inestabilidades posteriores 🤔
- 10-15° de retroversión o displasia moderada-severa ⚠️
- Técnica de Gerber 😬
- Tope óseo posterior Artroscópico ✅

Gracias