

# Lésions labrales antéro-inférieures issues du foramen sublabral chez le sportif lanceur de haut niveau



**Julien Berhouet MD**  
*Joshua S. Dines MD*  
**David Dines MD**

Sports Medicine and Shoulder Service  
Hospital for Special Surgery, New York



# Sublabral Foramen

## Inferior Extension Tears of the Labrum in High-Level Overhead Athletes



Julien Berhouet MD  
*Joshua S. Dines MD*  
David Dines MD

Sports Medicine and Shoulder Service  
Hospital for Special Surgery, New York



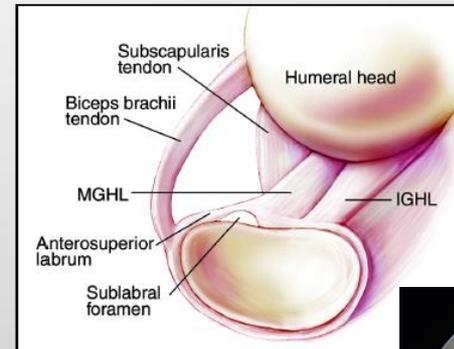
# Background

**Sublabral Foramen (SF)** = Groove between the normal anterosuperior labrum and the anterior articular cartilage

Relationship between SF and SLAP II lesions

Relationship between SLAP lesions and repetitive overhead throwing athletes (Kanatli et al., 2010)

=> New lesion identified in the same group of athletes: **SF Inferior extension tear of the labrum**



Purposes of the study:

- 1- highlight this lesion and its incidence
- 2- report functional outcomes in overhead athletes operated for this lesion

HOSPITAL  
FOR  
**SPECIAL  
SURGERY**



# Materials and Methods

## Retrospective review

2473 shoulders for evaluation  
(2007-2013)



8 patients = **SF with inferior extension tear** from the labrum  
4 M and 3 F, 20 yo  
3 baseball and 1 basketball players, 2 swimmers, 1 golfer



Mean post-operative follow-up 57 months  
(range, 38 to 72)

### Functional assessment

Kerlan-Jobe Orthopaedic Clinic Shoulder and Elbow (KJOC) Score  
(Domb et al., 2010)

Single Assessment Numeric Evaluation (SANE) Method  
(Williams et al., 1999)

Disabilities of the Arm, Shoulder and Hand (DASH) outcome measure  
DASH Sports Module

Conway score (Conway & Jobe, 1992)

# Results

2473 shoulders arthroscopies



200 shoulders (8.1%) with a normal SF variant



8 shoulders with SF with inferior extension tear from the labrum

=> Incidence = 4% amongst the shoulders with a normal SF  
0.3% amongst all shoulders undergoing arthroscopy



Functional outcomes (average)

-KJOC score = 76.5 (range, 66.5 to 100)

-SANE score = 91.6 (range, 75 to 100)

-DASH = 4.82 (range, 0 to 15)

-DASH sports module scores = 18.76 (range, 0 to 50)

-Conway score = 3 patients reported an excellent result and 2 patients reported a good result

# Discussion/Conclusion

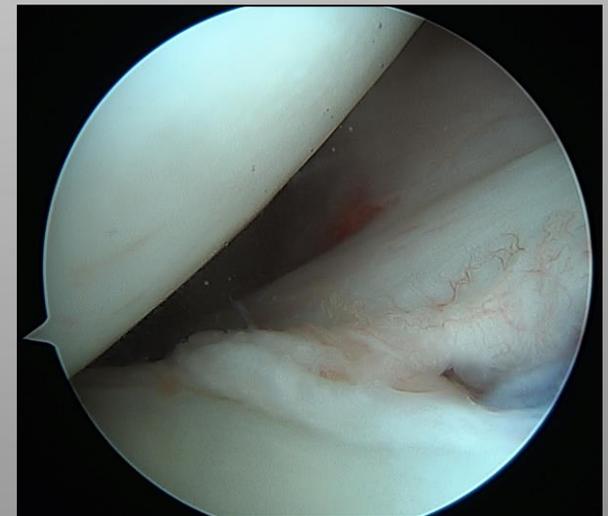
Very low incidence of SF and associated anteroinferior lesion compared to the association of the SF and type II SLAP lesion

- < misdiagnosis of this newly described lesion
- < misinterpretation of this lesion as an extensive Bankart lesion

=> first current study to describe and report the SF and inferior extension of the lesion, in overhead athletes



The critical factor in determining that the tear started as an inferior extension from a normal SF was the condition of the cartilage: pristine



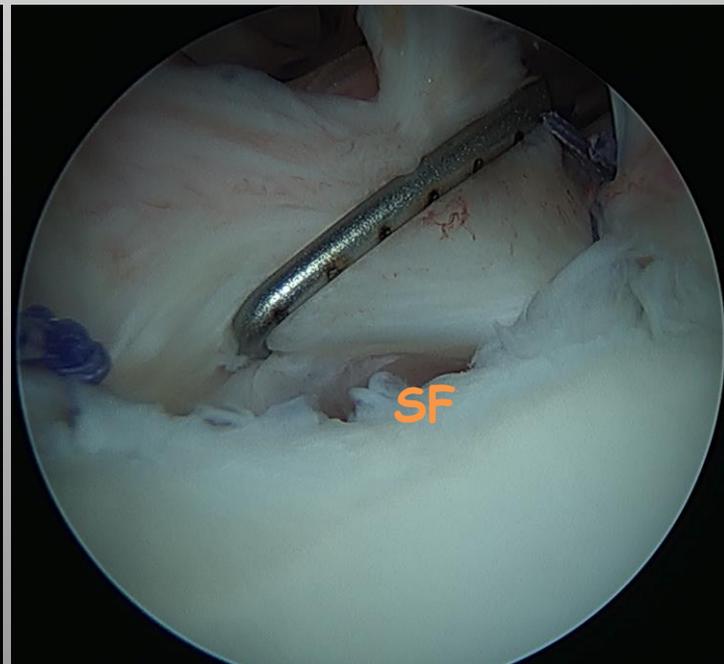
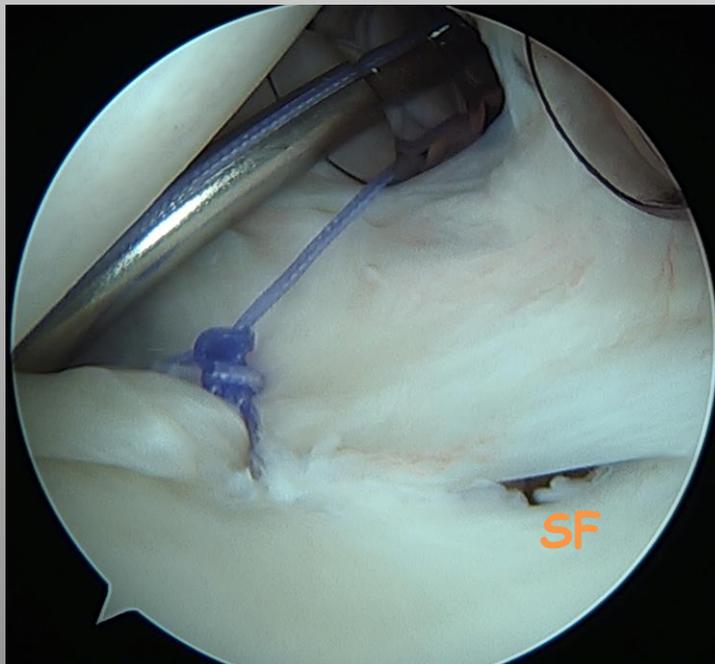
# Discussion/Conclusion

Knowledge of normal anatomical variants of the anterosuperior labrum

=> Correct diagnosis

=> Correct treatment for allowing to return the overhead athletes to their previous level of play

What is the surgical trick? **Don't close the SF**



# References

**Kanatli U, Ozturk BY, Bolukbasi S.** Anatomical variations of the anterosuperior labrum: prevalence and association with type II superior labrum anterior-posterior (SLAP) lesions. *J Shoulder Elbow Surg* 2010;19:1199-1203

**Ilahi OA, Labbe MR, Cosculluela, P.** Variants of the Anterosuperior Glenoid Labrum and Associated Pathology. *Arthroscopy* 2002;18:882-886

**Sayde WM, Cohen SB, Ciccotti MG, Dodson CC.** Return to Play After Type II Superior Labral Anterior-Posterior Lesion Repairs in Athletes. *Clin Orthop Relat Res* 2012;470:1595-1600

**Ide J, Maeda S, Takagi K.** Sports activity after arthroscopic superior labral repair using suture anchors in overhead-throwing athletes. *Am J Sports Med* 2005;33:507-514