Characteristics of Subluxators Versus Dislocators in First-Time Anterior Shoulder Instability

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Disclosures

Albert Lin, MD, FAAOS (Pittsburgh, PA)

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Introduction

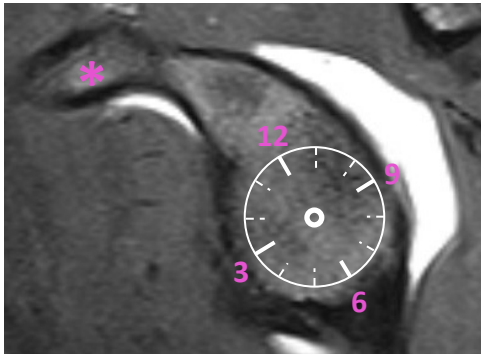
- Little is known about the differences in clinical course between subluxators and dislocators presenting with first-time anterior shoulder instability (FTAI)

- **Objective:**
  - **Compare epidemiology and outcomes between subluxators and dislocators after FTAI**

- **Hypothesis:**
  - **Subluxators will have a milder clinical presentation in comparison to dislocators**

Methods

- Surgically managed FTAI patients from a single institution between 2013-2020
- Defined subluxation and dislocation based on whether instability event required manual reduction
- Exclusion criteria: prior stabilization, multidirectional and recurrent instability.
- Labral tear location was determined using the clock method



Clock method for measuring labral tears. * = coracoid process, denoting anterior shoulder

Results

Variable	Subluxator (n=137)	Dislocator (n=109)	*P-value*
Male, n (%)	97 (70.8)	79 (72.5)	0.9
BMI, median (SD)	25.9 ± 6.5	26.5 ± 6.5	0.4
Dominant Hand, n (%)	58 (54.2)	48 (51.6)	0.8
Bony Bankart, n (%)	12 (8.8)	16 (14.7)	0.06
Hill-Sachs, n (%)	72 (52.6)	96 (88.1)	**<0.001**
Rotator Cuff Tear, n (%)	9 (6.6)	12 (11.0)	0.3
SLAP Tear, n (%)	37 (27.0)	31 (28.4)	0.9
Labral Tear Size, median (SD)	3.4 ± 2.1	3.4 ± 1.9	1.0

Variable	Subluxator (n=137)	Dislocator (n=109)	*P-value*
Surgery, n (%)			0.3
Arthroscopic	118 (86)	87 (79.8)	
Open	15 (10.9)	19 (17.4)	
Latarjet	4 (2.9)	3 (2.8)	
Remplissage	8 (6.0)	20 (18.9)	**0.002**
Anterior Labral Repair, n (%)	125 (91.2)	103 (29.9)	0.1
Anterior Anchors, median (SD)	3.2 ± 1.3	3.5 ± 1.0	0.1
Posterior Labral Repair, n (%)	43 (31.6)	32 (29.9)	0.8

- Revision rates: **not significantly different** between subluxators and dislocators (16.1% vs. 16.5%, p=1.0)
- **No difference** in the size or extent of the labral tears
- Hill-Sachs lesion more common in dislocators (88.1% vs 52.6%, p <0.001)

Conclusion

- Subluxators and dislocators:
  - Similar clinical presentations
    - Exception: more Hill-Sachs lesions in dislocators
  - No difference in the extent of labral injury
  - No difference in surgical technique or revision rate

- Tendency to bias subluxation event as “less severe” should be reconsidered

- Future research on patient reported outcomes in both populations underway