TABLE E-1 Descriptive Summary of Demographic Data, Subjective Sympton	No SLAP		Type II (N=29)	Types III-IV (N=7)
Variable	Lesion (N=405)	Type I (N=103)		
Gender (male)	220 (54%)	64 (62%)	18 (62%)	7 (100%)
Age (mean by year) (SD)	43.3 (17.9)	48.2 (16.1)	45.5 (15.1)	33.4 (16.9)
Involvement of dominant side	254 (63%)	68 (66%)	18 (62%)	4 (57%)
High-demand occupation (sports player, outdoor manual laborer)	54 (13%)	12 (12%)	4 (14%)	4 (57%)
Participation in overhead sports (throwing, racket & other overhead sports)	79 (20%)	23 (22%)	11 (38%)	2 (29%)
High-level sports activity (higher than high-school level)	51 (13%)	7 (7%)	3 (10%)	2 (29%)
Symptom onset with trauma history	262 (65%)	65 (63%)	20 (69%)	5 (71%)
Symptom onset after falling down	53 (13%)	18 (17%)	6 (21%)	0 (0%)
Symptom onset during sports activity	83 (20%)	23 (22%)	7 (24%)	5 (71%)
Subjective Symptoms (by visual analog scale with 100-point system)				
Rest pain (mean by point) (SD)	62 (33)	66 (30)	73 (25)	50 (41)
Night pain (mean by point) (SD)	67 (32)	73 (28)	68 (33)	59 (38)
Activity pain (mean by point) (SD)	81 (24)	79 (24)	76 (25)	81 (30)
Overhead pain (mean by point) (SD)	68 (27)	75 (26)	76 (16)	57 (39)
Sense of shoulder stability (mean by point) (SD)	43 (34)	42 (32)	44 (32)	18 (9)
Physical Findings				
PER at 90° abduction (SD)	88 (23.6)	88 (23.2)	102 (12.3)	97 (20.8)
PIR at 90° abduction (SD)	46 (26.8)	46 (24.9)	43 (27.1)	50 (26.5)
Difference in ROM of PER from normal side (mean by degree) (SD)	-3 (63)	-6 (11)	-2 (15)	0 (0)
Difference in ROM of PIR from normal side (mean by degree) (SD)	8 (16)	8 (15)	6 (20)	0 (0)
Neer impingement sign (positive) ²⁹	232/384 (60%)	65/103 (63%)	17/29 (59%)	3/7 (43%)
Hawkins impingement test (positive) ²³	235/382 (62%)	73/102 (72%)	20/29 (69%)	4/7 (57%)
Speed test (positive) ²³	92/334 (28%)	40/92 (43%)	8/26 (31%)	1/6 (17%)
Painful arc test (positive) ²³	94/198 (47%)	32/56 (57%)	11/19 (58%)	1/4 (25%)
Compression rotation test (positive) ¹	39/166 (23%)	12/53 (23%)	4/16 (25%)	1/3 (33%)
Anterior slide test (positive) ³⁸	43/248 (17%)	11/72 (15%)	3/23 (13%)	0/5 (0%)
Active compression test (positive) ³⁹	119/253 (47%)	43/76 (57%)	12/23 (52%)	1/5 (20%)
Relocation test (positive) 40	37/169 (22%)	10/49 (20%)	6/15 (40%)	0/3 (0%)
Apprehension test (positive) ²³	83/357 (23%)	15/100 (15%)	7/26 (27%)	3/7 (43%)

Variable Lesion Types III-IV Type I Type II (N=405)(N=103)(N=29)(N=7)**Laxity Tests Under Anesthesia** Anterior translation (higher than grade I) 295/387 (76%) 84/100 (84%) 25/29 (86%) 6/7 (86%) Posterior translation (higher than grade I) 18/29 (62%) 243/388 (63%) 65/100 (65%) 6/7 (86%) Sulcus sign (higher than grade I) 135/389 (35%) 36/100 (36%) 4/7 (57%) 7/29 (24%) **Arthroscopic Observations** Drive-through sign ¹⁴ 65/102 (64%) 18/29 (62%) 249/387 (64%) 7/7 (100%) Contact of rotator cuff to superior glenoid in flexion²⁴ 194/256 (76%) 51/66 (77%) 17/18 (94%) 4/5 (80%) Contact of rotator cuff to posterosuperior glenoid in extension and external rotation ²⁴ 221/255 (87%) 57/68 (84%) 16/19 (84%) 4/5 (80%) **Associated Pathologies** Supraspinatus tear 197/399 (49%) 68/101 (67%) 17/29 (59%) 3/7 (43%) Partial-thickness 141/399 (35%) 49/101 (49%) 11/29 (38%) 3/7 (43%) Full-thickness 56/399 (14%) 19/101 (19%) 6/29 (21%) 0/7(0%)Infraspinatus tear 31/398 (8%)) 6/103 (6%) 1/29 (3%) 0/7 (0%)

No SLAP

21/398 (5%)

10/398 (3%)

43/229 (19%)

35/229 (15%)

8/229 (3%)

70/337 (21%)

89/329 (27%)

59/405 (15%)

48/405 (12%)

5/103 (5%)

1/103 (1%)

13/61 (21%)

12/61 (20%)

1/61 (2%)

15/90 (17%)

23/88 (26%)

24/103 (23%)

18/103 (17%)

0/29 (0%)

1/29 (3%)

4/20 (20%)

4/20 (20%)

0/20 (0%)

8/26 (31%)

9/26 (35%)

9/29 (31%)

4/29 (14%)

0/7 (0%)

0/7(0%)

1/4 (25%)

0/7 (0%)

0/4(0%)

5/7 (71%)

4/7 (57%)

1/7 (14%)

1/7 (14%)

TABLE E-2 Descriptive Summary of Findings of Laxity Tests, Arthroscopic Observations and Intra-articular Pathologies

Partial-thickness

Partial-thickness

Humeral head osteoarthritis

Full-thickness

Full-thickness

Glenoid osteoarthritis

Bankart lesion

Hill-Sachs lesion

Subscapularis tear

Variable Descriptive comparison Control ≤40 >40 OR^B (N=405)(N=13)(N=16)Demographic Data

79 (20%)

262 (65%)

62 (33)

295/387 (76%)

197/399 (49%)

70/337 (21%)

89/329 (27%)

59/405 (15%)

207 (51%)

119 (29%)

and the variables with a p value between 0.05 and 0.2 are presented with plain-styled p values.

Abbreviations: OR = odds ratio, CI = confidence interval, SD = standard deviation

(Control Group)^A

Involvement of dominant side

Symptom onset with trauma

history

Subjective Symptom

Arthroscopic Findings Supraspinatus tear

Bankart lesion

Primary Diagnosis

Hill-Sachs lesion

Rotator cuff disease

Glenohumeral instability

means a negative association.

Participation in overhead sports

Rest pain (mean by point) (SD)

Anterior translation (high grade)

Laxity Tests Under Anesthesia

Humeral head osteoarthritis

254 (63%) 11 (85%) 7 (44%)

6 (46%)

11 (85%)

68 (28)

10/13 (77%)

3/13 (23%)

7/11 (64%)

5/11 (45%)

2/13 (15%)

5 (38%)

6 (46%)

TABLE E-3. Comparison of the Subgroups of Type II SLAP Lesions Divided by the Age of Forty with the Group Without a SLAP Lesion

Univariate comparison

P Value

0.127

0.027

0.157

> 0.2

> 0.2

0.077

0.003

0.190

>0.2

>0.2

>0.2

 OR^B

0.46

1.02

4.68

7.18

4.56

6.69

Control vs. >40

P Value

0.134 > 0.2

>0.2

0.104

0.138

0.010

>0.2

> 0.2

0.004

0.013

N/A

(95% CI)

(0.17-1.23)

(1.0-1.04)

(0.61-35.88)

(1.61-32.00)

(1.64-12.72)

(1.50-29.83)

Control vs. ≤40

(95% CI)

(0.72-14.95)

(1.16-10.82)

(0.66-13.73)

(0.08-1.13)

(1.90-23.45)

(0.67-7.54)

3.27

3.54

3.00

0.31

6.68

2.24

5 (31%)

9 (56%)

76 (23)

15/16 (94%)

14/16 (88%)

1/14 (7%)

4/15 (27%)

7/16 (44%)

14 (88%)

0(0%)

A The variables with a p value smaller than 0.2 are included in this table. The significant variables (p < 0.05) are provided with bold-styled p values

^B OR greater than one (1.0) means a positive association between the independent variables and the dependent variable while OR smaller than one