

TABLE E-1 Distribution of Age, Diagnosis, Gender, and Self-Assessed Shoulder Function*

Age (years):	30-39	40-49	50-59	60-69	70-79	80-89	OVERALL
Primary DJD							
<i>ISST mean (SD)</i>	5.0 (0)	6.0 (0)	5.1 (2.1)	4.4 (1.7)	3.0 (1.6)	n/a	4.7 (1.9)
<i>FSST mean (SD)</i>	12.0 (0)	9.0 (0)	9.3 (2.2)	10.0 (2.4)	8.3 (3.1)	n/a	9.5 (2.4)
<i>DSST mean (SD)</i>	7.0 (0)	3.0 (0)	4.2 (2.5)	5.6 (2.6)	5.3 (3.3)	n/a	4.8 (2.7)
<i>n=men</i>	n=1	n=1	n=12	n=7	n=3	n=0	n=24
<i>n=women</i>	n=0	n=0	n=1	n=1	n=0	n=0	n=2
CA							
<i>ISST mean (SD)</i>	n/a	9 (1.0)	7.5 (0.5)	3.0 (0)	n/a	n/a	7.2 (2.3)
<i>FSST mean (SD)</i>	n/a	10.5 (1.5)	10.0 (2.0)	10.0 (0)	n/a	n/a	10.2 (1.6)
<i>DSST mean (SD)</i>	n/a	1.5 (2.5)	2.5 (1.5)	7.0 (0)	n/a	n/a	3.0 (2.8)
<i>n=men</i>	n=0	n=2	n=2	n=1	n=0	n=0	n=5
<i>n=women</i>	n=0	n=0	n=0	n=0	n=0	n=0	n=0
Secondary DJD							
<i>ISST mean (SD)</i>	4.0 (0)	n/a	1.0 (0)	n/a	n/a	1.0 (0)	1.8 (1.3)
<i>FSST mean (SD)</i>	10.0 (0)	n/a	4.0 (2.0)	n/a	n/a	12.0 (0)	7.5 (3.8)
<i>DSST mean (SD)</i>	6.0 (0)	n/a	3.0 (2.0)	n/a	n/a	11.0 (0)	5.8 (3.6)
<i>n=men</i>	n=1	n=0	n=1	n=0	n=0	n=1	n=3
<i>n=women</i>	n=0	n=0	n=1	n=0	n=0	n=0	n=1
OVERALL							
<i>ISST mean (SD)</i>	4.5 (0.5)	8.0 (1.6)	4.9 (2.4)	4.2 (1.6)	3.0 (1.6)	1.0 (0)	
<i>FSST mean (SD)</i>	11.0 (1.0)	10.0 (1.4)	8.8 (2.8)	10 (2.2)	8.3 (3.1)	12.0 (0)	
<i>DSST mean (SD)</i>	6.5 (0.5)	2.0 (2.2)	3.9 (2.5)	5.8 (2.4)	5.3 (3.3)	11 (0)	
<i>n=men</i>	n=2	n=3	n=15	n=8	n=3	n=1	
<i>n=women</i>	n=0	n=0	n=2	n=1	n=0	n=0	

*DJD = degenerative joint disease, CA = capsulorrhaphy arthropathy, SD = standard deviation, ISST = initial Simple Shoulder Test, FSST = final Simple Shoulder Test, and DSST = change in the Simple Shoulder Test.

TABLE E-2 Change in the Number of Shoulder Functions Performed at a Minimum of Two Years of Follow-up after Humeral Hemiarthroplasty with Concentric Glenoid Reaming

Function	<i>Preoperative Status</i>	<i>Number of shoulders with a change from preoperative status</i>			
	Answer	Number of Shoulders	Yes→No	No→Yes	p value
1. Place arm comfortably at side	Yes	24	1		p<0.022
	No	11		9	
2. Sleep comfortably	Yes	5	0		p<0.00001
	No	30		21	
3. Tuck in back of shirt	Yes	5	1		p<0.00001
	No	30		24	
4. Place hand behind head	Yes	11	0		p<0.00001
	No	24		21	
5. Place coin on shelf	Yes	16	0		p<0.00001
	No	19		18	
6. Lift 1 lb (0.5 kg) to shoulder level	Yes	23	2		p<0.013
	No	12		12	
7. Lift 8 lb (3.6 kg) to shoulder level	Yes	9	4		p<0.0072
	No	26		17	
8. Carry 20 lb (9.1 kg) at side	Yes	32	0		NS
	No	3		2	
9. Toss softball 20 yd (18.3 m) underhand	Yes	18	3		NS
	No	17		10	
10. Toss softball 20 yd (18.3 m) overhand	Yes	1	0		p<0.00001
	No	34		18	
11. Wash back of contralateral shoulder	Yes	7	4		p<0.019
	No	28		15	
12. Work full-time in regular job	Yes	13	2		p<0.0042
	No	22		14	

TABLE E-3 Radiographic Characteristics and Their Association with Self-Assessed Functional Outcome*

<i>Radiographic Characteristics</i>	<i>ISST Mean (SD)</i>	<i>FSST Mean (SD)</i>	<i>DSST Mean+/- (SD)</i>
Preoperative (n=35)			
<i>Medial Glenoid Erosion</i> (n=12)	4.7 (2.5)	9.8 (3.0)	5.2 (3.2)
<i>No Glenoid Erosion</i> (n=23)	4.7 (2.4)	9.1 (2.4)	4.4 (2.7)
	p=0.48	p=0.23	p=0.24
<i>Concentric Glenoid</i> (n=14)	3.6 (3.0)	9.6 (2.9)	5.7 (3.2)
<i>Eccentric Glenoid</i> (n=21)	5.2 (1.7)	9.2 (2.4)	4.0 (2.5)
	p=0.045	p=0.36	p=0.045
<i>Residual Joint Space</i> (n=9)	5.6 (2.8)	10.4 (1.3)	4.8 (3.3)
<i>No Residual Joint Space</i> (n=26)	4.4 (2.2)	9.0 (2.8)	4.6 (2.8)
	p=0.11	p=0.08	p=0.44
Postoperative (n=34)*			
<i>Progressive Medial Erosion</i> (n=4)	-	9.3 (2.4)	4.8 (2.5)
<i>No Progressive Erosion</i> (n=30)	-	9.4 (2.6)	4.7 (2.9)
		p=0.46	p=0.49
<i>Concentric Glenoid</i> (n=28)	-	9.3 (2.7)	4.6 (3.3)
<i>Eccentric Glenoid</i> (n=6)	-	9.7 (2.3)	5.0 (2.1)
		p=0.39	p=0.40
<i>Regenerated Joint Space</i> (n=22)	-	10.1 (2.7)	5.3 (2.9)
<i>No Regenerated Joint Space</i> (12)	-	8.2 (2.0)	3.7 (2.6)
		p<0.017	p=0.065
<i>Subchondral Sclerosis</i> (n=12)	-	9.4 (3.2)	5.3 (3.0)
<i>No Subchondral Sclerosis</i> (n=22)	-	9.4 (2.3)	4.4 (2.8)
		p=0.47	p=0.22
<i>Proper Register</i> (n=32)	-	9.5 (2.6)	4.8 (2.9)
<i>Improper Register</i> (n=2)	-	7.0 (2.0)	4 (3.0)
		p=0.21	p=0.42
<i>Component Loosening</i> (n=1)	-	11 (0)	5 (0)
<i>No Component Loosening</i> (n=33)	-	9.3 (2.7)	4.7 (3.0)

*Adequate preoperative, postoperative, and follow-up radiographs were available for 34 (97%) of 35 shoulders. One patient, living outside of the continental United States, received follow-up care from a local surgeon who was unable to provide radiographic data concerning his case. ISST = initial Simple Shoulder Test, FSST = final Simple Shoulder Test, and DSST = change in the Simple Shoulder Test.