

TABLE E-1 Self-Assessed Shoulder Functions in Control and Study Patients\*

	Function	Normal Controls (N = 49)†	Current Study of Patients with Supraspinatus Tears				
			Total (N = 333)†	Infraspinatus Intact (N = 256)†	Infraspinatus Torn (N = 77)†	P Value	Power
SST Question							
1	Comfortable at rest	100%	66%	65%	69%	0.4723	0.107
2	Sleep comfortably	100%	16%	15%	17%	0.6616	0.071
3	Tuck in shirt	100%	54%	54%	55%	0.9078	0.052
4	Place hand behind head	100%	51%	55%	37%	0.0068	0.787
5	Lift coin to shoulder level	100%	52%	57%	33%	0.0003	0.972
6	Lift 1 lb (0.5 kg) to shoulder level	100%	43%	47%	28%	0.0036	0.850
7	Lift 8 lb (3.6 kg) to shoulder level	98%	11%	13%	3%	0.0093	0.749
8	Carry 20 lb (9.1 kg)	98%	44%	44%	44%	0.9695	0.050
9	Toss underhand	100%	31%	31%	31%	0.9238	0.051
10	Throw overhand	96%	9%	9%	11%	0.5837	0.083
11	Wash contralateral shoulder	100%	30%	29%	31%	0.8199	0.056
12	Do usual work	100%	36%	36%	33%	0.6351	0.075
Average no. of functions that patients able to perform		11.9	4.4	4.6	3.9		

\*The ability of patients to perform each of the twelve shoulder functions of the Simple Shoulder Test (SST) were compared with the results from previously reported normal controls<sup>33</sup>. Data are shown for the total group of 333 patients with supraspinatus tears and for the subsets of patients with and without infraspinatus tears. The p value and the power value refer to the difference between patients without and with infraspinatus tears. †With the exception of the values in the bottom row, all data are given as the percentage of patients who responded positively to each question.

TABLE E-2

Association of Gender and Infrapinatus Integrity with Shoulder Function as Reflected by All Twelve Functions of the Simple Shoulder Test (SST) and the Three Questions Regarding Lifting Different Weights to Shoulder Level

	Male*	Female*	Gender Effect		Infrapinatus Effect	
			P Value	Power	P Value	Power
Overall SST Score			<0.0001	1	0.086	0.388
Infrapinatus intact	5.4 ± 2.8 (151)	3.3 ± 2.5 (107)				
Infrapinatus tear	4.7 ± 3.2 (46)	2.7 ± 2.8 (29)				
Partial SST Score (questions 5, 6, 7)			0.0011	0.925	0.0002	0.979
Infrapinatus intact	1.4 ± 1.1 (151)	0.85 ± 0.98 (107)				
Infrapinatus tear	0.78 ± 0.96 (46)	0.41 ± 0.78 (29)				

\*The data are expressed as the average number of functions that the patients were able to perform, with the number of patients in each group in parentheses.

TABLE E-3 Correlation of Shoulder Function, Social Comorbidity, Medical Comorbidity, and the Eight Component Scores of the Short Form-36 (SF-36)\*

	Overall SST Score	Social Comorbidity	Medical Comorbidity
Overall SST Score	1	-0.181	-0.167
SF-36 Subscales			
Emotional Role	0.311	-0.263	-0.162
General Health	0.277	-0.277	-0.515
Mental Health	0.319	-0.155	-0.17
Comfort	0.422	-0.159	-0.209
Physical Function	0.442	-0.198	-0.415
Physical Role	0.327	-0.155	-0.218
Social Function	0.355	-0.216	-0.266
Viability	0.312	-0.153	-0.338

\*The values are given as the correlation coefficient, r. SST = Simple Shoulder Test.

TABLE E-4 Differences in the Characteristics of 333 Patients Among the Ten Different Practices\*

	Physician										Total	P Value	Power
	A	B	C	D	E	F	G	H	I	J			
No. of cases/physician	19	39	16	12	15	11	12	57	120	32	333		
Average age of patients (yr)	60 ± 11	58 ± 10	59 ± 10	71 ± 9	60 ± 11	61 ± 7	62 ± 16	55 ± 10	57 ± 13	58 ± 9	58 ± 12	0.0040	0.96
No. of male patients	10 (53%)	27 (69%)	13 (81%)	9 (75%)	14 (93%)	4 (36%)	5 (42%)	32 (56%)	68 (57%)	15 (47%)	197 (59%)	0.0160	0.91
Method of diagnosis ( <i>no. of patients</i> )													
Arthrogram	14 (74%)	0 (0%)	14 (88%)	0 (0%)	2 (13%)	0 (0%)	10 (83%)	5 (9%)	5 (4%)	0 (0%)	50 (15%)	0.0001	1.00
MRI	5 (26%)	35 (90%)	4 (25%)	0 (0%)	13 (87%)	9 (82%)	1 (8%)	30 (53%)	111 (93%)	32 (100%)	240 (72%)	0.0001	1.00
Ultrasound	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (50%)	0 (0%)	0 (0%)	1 (3%)	7 (2%)	0.0001	1.00
Arthroscopy	0 (0%)	34 (87%)	0 (0%)	1 (8%)	0 (0%)	3 (27%)	0 (0%)	47 (82%)	39 (33%)	3 (9%)	127 (38%)	0.0001	1.00
Surgery	0 (0%)	39 (100%)	3 (19%)	12 (100%)	2 (13%)	10 (91%)	4 (33%)	4 (7%)	114 (95%)	0 (0%)	188 (56%)	0.0001	1.00
Tendons torn ( <i>no. of patients</i> )													
Infraspinatus	3	13	5	8	6	0	3	15	23	1	77	0.0008	0.99
Subscapularis	0	0	5	0	0	0	0	4	16	0	25	0.0004	0.99
LHB	0	0	6	3	1	0	3	4	25	1	43	0.0003	0.99
Chronicity and injury ( <i>no. of patients</i> )													
Symptoms >6 mo	10	13	9	10	11	11	9	27	66	17	183	0.0021	0.97
Injury to shoulder	12	23	4	9	8	8	12	43	67	17	203	0.0040	0.96
Previous treatment													
Cortisone ( <i>no. of patients</i> )	4	11	5	8	7	9	11	29	60	13	157	0.0003	0.99
Average no. of injections	0.5	0.4	0.4	1.3	0.7	1.5	1.2	0.8	0.8	0.6	0.7	0.0012	0.98
PT ( <i>no. of patients</i> )	12	18	9	5	8	7	6	38	64	13	180	0.4870	0.47
Previous surgery ( <i>no. of patients</i> )	1	0	0	1	0	0	0	7	0	1	10	0.0005	0.99
Comorbidities													
Problems healing ( <i>no. of patients</i> )	1	0	1	0	0	0	4	0	5	3	14	0.0001	1.00
Average no. of medical comorbidities	0	0	0.31	0.25	0.07	0	0.25	0.07	0.21	0.03	0.13	0.0100	0.93
Average no. of social comorbidities	0.84	0.46	0.88	1	1	1.64	0.75	0.54	0.71	0.59	0.71	0.0001	1.00
SF-36 scores†													
Emotional role	67%	80%	68%	50%	56%	46%	70%	64%	65%	80%	67%	0.1340	0.72
General health	74%	80%	82%	78%	71%	69%	78%	75%	77%	83%	77%	0.2180	0.64
Mental health	70%	82%	81%	76%	81%	77%	78%	74%	75%	75%	76%	0.4070	0.51
Comfort (pain)	36%	41%	45%	32%	42%	36%	32%	36%	36%	39%	37%	0.5740	0.42
Physical function	65%	78%	69%	63%	76%	70%	55%	61%	64%	68%	66%	0.0169	0.91
Physical role	12%	26%	38%	8%	32%	25%	11%	21%	22%	41%	24%	0.0381	0.86
Social function	81%	84%	77%	66%	81%	67%	59%	71%	72%	78%	74%	0.0549	0.83
Vitality	54%	61%	68%	53%	68%	48%	47%	55%	53%	58%	56%	0.0614	0.82
Shoulder function													
Overall SST score	3.5	5.5	5.4	2.7	3.7	7.5	3	4.1	4	5.2	4.4	0.0001	1.00
Partial SST score (questions 5,6,7)	0.9	1.3	1.3	0.3	0.9	2.2	0.8	1	0.9	1.3	1	0.0001	1.00

\*MRI = Magnetic resonance imaging, LHB = rupture of the long head of the biceps, PT = physical therapy, SF-36 = Short Form-36, and SST = Simple Shoulder Test. †The values are given as the percent of age and gender-matched controls.