

TABLE E-1 Data on RCR (Rotator Cuff Repair) Cohort

Case	Age (yr)	Sex	Time Between Symptoms and Repair (mo)		No. of Injections	Side of Op.	Dominant Side	Size of Tear (cm)	Extent of Retraction (cm)	Type of SLAP Lesion	Litigation	Return to Work	Return to Sports	Occupation	Sport
			Traumatic Tears	Atraumatic Tears											
1	52	F	12	—	1	R	R	0.5	0	Not applic.	N	Y	Y	Registered nurse	Gym
2	64	M	16	—	2	R	R	1	0	Not applic.	N	Retired	Y	Laborer	Golf, dance
3	67	F	—	18	0	R	R	2.5	0	Not applic.	N	Retired	Y	Retired	Tennis
4	63	F	—	36	2	R	R	2	0.5	Not applic.	N	Y	Not applic.	Homemaker	None
5	61	M	—	120	1	R	R	1.5	0	Not applic.	N	Retired	Not applic.	Janitor	None
6	61	F	21	—	0	R	R	5	1.5	Not applic.	N	Y	Y	Tutor	Skiing, jogging
7	53	F	2	—	0	R	R	2	0.5	Not applic.	N	Y	Y	Tennis pro	Tennis, swimming
8	53	F	1	—	0	L	L	3	1.2	Not applic.	N	Y	Y	Registered nurse	Bicycling
9	49	M	—	180	1	L	R	3	0.5	Not applic.	N	N	N	Painter	None
10	75	F	18	—	1	R	L	3	2	Not applic.	N	Y	Not applic.	Social worker; retired	None
11	64	F	—	12	3	R	R	2.5	0	Not applic.	N	Y	Not applic.	Secretary	None
12	47	F	—	18	0	R	R	5	3	Not applic.	N	Y	Y	Homemaker	Horseback riding
13	53	F	—	6	0	R	R	1.7	1	Not applic.	N	Y	Not applic.	Receptionist	None
14	53	M	—	26	1	R	R	0.5	0	Not applic.	N	Y	N	Office	Softball
15	69	M	—	8	0	R	R	2.7	1.5	Not applic.	N	Y	Y	Laborer	Jogging, fishing

16	52	F	—	16	1	L	R	2	1	I	N	Y	Y	Secretary	Swimming
17	63	M	4	—	0	R	L	4.5	1.7	I	N	Y	Y	Lawyer	Skiing
18	63	M	9	—	0	R	R	3	1	I	N	Y	Y	Consultant	Swimming
19	43	M	—	192	4	R	R	0.5	0	I	N	Y	Y	Computers	Weights
20	56	M	12	—	3	R	R	5	2	I	N	Y	Y	Finance	Hockey
21	70	F	2	—	0	R	R	3.5	1.5	Not applic.	N	Y	Not applic.	Registered nurse; retired	None
22	68	M	—	23	2	L	R	2.5	1.5	Not applic.	N	Y	Not applic.	Cab driver	None
23	65	M	18	—	0	L	R	5	2.5	Not applic.	N	Y	Y	Architect	Swimming, rowing
24	59	M	5	—	0	R	R	5	4	Not applic.	Workers' Comp.	N	Y	Business	Kayaking
25	63	M	24	—	3	R	R	0.5	0	Not applic.	N	Y	Not applic.	Retired	Bicycling
26	64	M	4	—	0	L	R	3	0.3	Not applic.	N	Y	Y	Manager	Racquetball
27	51	M	18	—	2	L	R	5	4	Not applic.	Workers' Comp.	Y	Not applic.	Laborer	None
28	67	F	6	—	0	R	R	5	2.5	Not applic.	N	N	Not applic.	Retired	None

TABLE E-2 Data on RCR + SLAP (Rotator Cuff and SLAP Repair) Cohort

Case	Age (yr)	Sex	Time Between Symptoms and Repair (mo)		No. of Injections	Side of Op.	Dominant Side	Size of Tear (cm)	Extent of Retraction (cm)	Type of SLAP Lesion	Litigation	Return to Work	Return to Sports	Occupation	Sport
			Traumatic Tears	Atraumatic Tears											
1	51	F	4	—	1	R	R	3	1.7	II	Workers' Comp.	Y	Y	Zoo worker	Kayaking
2	53	M	5	—	1	R	R	2	0	II	No	Y	N†	Engineer	Weight-lifting
3	64	F	15	—	2	L	R	3.7	1	II	No	Retired	Y	Retired	Skiing, ice skating
4	52	M	—	13	0	R	R	2.7	1	II	No	Y	Y	Drummer	Swimming
5	59	M	18	—	1	R	R	2.5	0	II	No	Y	Not applic.	Laborer	None
6	69	M	—	20	0	L	R	3	1	II	No	Y	Y	Laborer	Fishing, running
7	59	F	17	—	2	R	R	2	0	II	No	Y	Y	Artist	Swimming
8	50	M	7	—	1	L	R	2	0	II	Motor-veh. acc.	Y	Y	Laborer	Racquetball, pool
9	61	M	—	53	0	R	R	4	2.5	II	Workers' Comp.	Y	Y	Electrician	Tennis, softball
10	56	M	4	—	0	L	R	2	3.4	II	No	N	N*	Plumber	Golf
11	60	F	—	2	0	R	R	2.5	1.7	II	No	Y	Not applic.	Homemaker	None
12	40	M	—	12	0	L	R	4	2.5	II	No	Y	Y	Engineer	Weight-lifting
13	54	F	—	240	0	R	R	2.2	0.8	II	No	Y	Y	Homemaker	Pottery
14	59	M	—	24	?	R	R	2.5	0	IV	No	Retired	Y	Police officer; retired	Power lifting
15	68	M	—	24	1	R	R	4	2.5	II	No	Retired	Y	Principal; retired	Kayaking, skiing, hiking
16	53	F	—	31	2	R	R	2.5	0	II	No	Y	Y	Computers	Bowling
17	66	F	5	—	0	L	R	3	0	V	No	Y	Not applic.	Homemaker	None

18	43	M	2	—	0	R	R	0.5	0	II	No	Y	Y	Plumber	Fishing
19	67	F	18	—	0	R	R	0.7	0	II	No	Y	Y	Artist	Walking
20	65	M	—	6	0	L	R	4	1	II	No	Y	Y	Photographer	Tennis
21	48	M	9	—	0	R	R	5	1.9	II	No	Y	Y	Laborer	Hockey
22	69	F	7	—	1	R	R	1	0	II	No	Retired	Y	Registered nurse; retired	Tennis
23	57	M	—	360	1	L	R	2	0.3	II	No	Y	Y	Executive	Swimming
24	42	M	8	—	0	R	R	1.2	0	II	No	Y	Y	Consultant	Windsurfing, tennis, golf, skiing
25	54	F	—	12	2	R	R	3	0	II	No	Y	Y	Homemaker	None
26	62	M	—	12	2	R	R	3	1	II	No	Y	Y	Office worker	Nautilus, running
27	58	F	9	—	1	L	R	2.5	0.5	II	No	Y	Y	Office worker	Swimming
28	58	M	—	24	0	L	R	2.5	0.3	II	No	Y	Y	Office worker	Hockey
29	46	F	7	—	0	L	R	1.5	0	II	Workers' Comp.	Y†	Y	Army	Walking
30	64	M	4	—	0	R	R	3.5	1.5	II	Workers' Comp.	Y	Y	Construction	Deep sea fishing, running
31	47	F	16	—	1	R	R	2.5	1	II	Motor-veh. acc.	Y	Y	Yoga	Yoga
32	64	M	18	—	1	R	R	2.7	1	II	No	Y	Y	Executive	Golf
33	59	M	—	4	1	L	L	2.5	0.5	II	No	Y	Y	Lawyer	Squash
34	57	M	—	125	2	R	R	2.5	0.5	II	No	Y	Y	Office worker	Hockey

\*Not related to the surgery. †Returned to work on a limited basis.

TABLE E-3 Constant and ASES Scores\*

Patient Group	Preoperative Score			Postoperative Score		
	Constant (points)	Normalized Constant (points)	ASES* (points)	Constant (points)	Normalized Constant (points)	ASES* (points)
RCR (rotator cuff repair)						
1	81.3	96.7	16.7	84	100	100
2	76.3	82.9	35	92	100	100
3	59.5	71.7	40	83	100	98.3
4	57	68.7	6.7	71.5	86.1	93.3
5	63	68.5	40	88	95.6	93.3
6	63	75.9	45	81	97.6	91.6
7	39.3	46.7	26.7	84	100	100
8	30	35.7	13.3	84	100	100
9	76.5	79.7	33.3	78	81.3	50
10	48	59.3	26.7	81	100	100
11	44	53	1.7	70.5	84.9	88.3
12	35.9	41.7	23.3	84.6	88.4	100
13	38.3	45.5	11.7	84	100	100
14	64.8	77.1	53.3	82	97.6	93.3
15	42.5	46.2	18.3	92	100	100
16	58.5	68	25	89.8	106.9	100
17	77	83.7	70	92	100	100
18	69.5	75.5	58.3	92	100	98.3
19	81.5	84.9	86.7	84.5	88	93.3
20	60.5	64.4	30	84	89.4	63.3
21	20.5	25.3	30	87	100	96.7
22	38.5	41.8	0	92	100	85
23	75.3	81.8	100	92	100	100
24	58	61.7	41.7	93.5	99.4	93.3
25	49.5	53.8	48.3	92	100	100
26	59	64.1	60	89	96.7	91.7
27	27.3	29	13.3	76.5	81.4	78.3
28	12.5	15	6.7	75	90.4	76.7
RCR + SLAP (rotator cuff and SLAP repair)						
1	45.3	53.9	13.3	98.9	117.7	100
2	64.5	68.6	48.3	95	101.1	95

3	63	75.9	46.7	83	100	100
4	59.5	62	28.3	95	99	100
5	60	63.8	26.7	99.8	106.2	100
6	38.5	41.8	20	92	100	100
7	41.8	49.7	28.3	78.2	93.2	98.3
8	57	60.6	10	100.3	104.4	98.3
9	43.8	46.5	8.3	100	106.4	100
10	29	30.9	13.3	96.4	102.6	100
11	23	27.7	5	84.3	101.6	98.3
12	65	68.4	10	100	105.3	100
13	62	73.8	11.7	82.1	97.7	96.7
14	58	61.7	31.7	90.2	96	98.3
15	66.5	72.3	43.3	100	108.7	100
16	29.5	35.1	11.7	79	94	95
17	35	42.2	5	86.5	104.2	100
18	65.5	68.2	6.7	94.7	98.6	88.3
19	54	65.1	8.3	84	100	100
20	78.3	85	60	94.3	102.5	100
21	52.5	54.7	1.7	100	104.2	100
22	37	44.5	13.3	92.4	111.3	100
23	78.5	83.5	46.7	94.4	100.4	100
24	62	65.3	31.7	87.7	92.3	93.3
25	30	35.7	8.3	92.2	109.8	98
26	67.8	72.1	36.7	100	108.7	100
27	57.8	68.8	43.3	88.7	105.6	100
28	35	37.2	48.3	95.2	101.3	100
29	27	31.4	16.7	76.8	89.3	50
30	47.5	51.4	18.3	98.8	107.4	100
31	53	61.6	16.7	75.5	87.8	81.7
32	13.5	14.7	16.7	92	100	100
33	45	47.9	10	74.9	79.7	90
34	49.8	52.9	23.3	91.7	97.6	95.8

\*ASES = American Shoulder and Elbow Surgeons.

TABLE E-4 Range of Motion

Patient Group	Preoperative ( <i>deg</i> )			Postoperative ( <i>deg</i> )		
	Forward Flexion	Abduction	External Rotation	Forward Flexion	Abduction	External Rotation
RCR (rotator cuff repair)						
1	160	160	50	150	150	45
2	155	150	50	170	165	75
3	150	145	35	170	170	75
4	145	135	45	170	165	75
5	140	120	50	170	165	75
6	160	155	55	170	165	75
7	120	120	45	165	165	75
8	140	140	30	165	165	65
9	170	170	80	170	165	75
10	165	165	60	120	100	40
11	150	145	55	165	160	75
12	150	145	50	165	165	75
13	160	160	60	170	170	70
14	155	150	75	165	165	80
15	165	160	45	165	165	75
16	155	150	50	170	170	85
17	160	155	45	160	155	65
18	165	165	60	180	160	70
19	150	140	45	160	160	75
20	150	145	50	160	150	60
21	90	90	30	110	100	40
22	160	120	50	165	160	70
23	155	150	55	165	160	75
24	145	140	45	165	160	70
25	150	145	50	165	160	65
26	150	140	45	170	165	75
27	120	90	30	165	165	70
28	30	30	20	165	165	60
RCR + SLAP (rotator cuff and SLAP)						

repair)						
1	140	135	50	170	165	75
2	150	145	45	165	165	75
3	155	145	40	165	160	65
4	150	150	65	170	165	75
5	150	145	60	160	150	50
6	90	60	40	165	160	70
7	150	145	45	170	170	75
8	150	150	55	155	150	60
9	160	160	25	170	165	70
10	40	40	30	165	165	60
11	165	175	50	170	165	70
12	165	160	75	165	165	80
13	165	165	65	165	165	75
14	130	100	50	150	160	55
15	160	150	70	170	170	60
16	130	140	50	170	165	75
17	75	75	35	160	160	65
18	165	165	70	170	165	75
19	155	150	45	165	160	80
20	160	155	55	140	165	75
21	165	160	80	175	165	80
22	170	85	40	175	175	45
23	160	155	75	170	170	50
24	160	155	65	165	165	70
25	150	145	55	165	150	75
26	165	120	70	170	170	75
27	150	145	55	170	170	75
28	155	150	50	165	160	70
29	150	150	40	160	155	70
30	160	155	45	165	165	75
31	165	160	65	150	120	45
32	155	150	50	165	165	70
33	140	140	50	155	150	60
34	150	145	60	165	160	70