

Table E1. Pre and postoperative shoulder function and PENN scores.

#	M/F	Age yrs	FU mos	PrFF	PoFF	PrER	PoER	PrER90	PoER90	Pr PENN SCORE (100)	Po PENN SCORE (100)	PrP (30)	PoP (30)	PrS (10)	PoS (10)	PrF(60)	PoF (60)	Do it?
1	M	58	24	40	125	60	42	85	40	36	75	12	21	0	10	24	44	Y
2	M	45	33	170	170	20	40	40	70	36	74	15	23	0	7	21	44	Y
3	M	56	35	160	171	0	11	10	60	79	94	22	25	3	10	54	59	Y
4	F	54	33	125	134	40	55	15	75	12	47	6	19	0	7	6	21	Y
5	M	55	39	120	143	15	33	30	75	33	87	8	26	0	7	25	54	Y
6	M	59	46	10	157	0	23	5	45	54	98	30	29	0	10	24	59	Y
7	M	44	33	175	183	25	30	70	100	55	90	18	30	4	9	33	51	Y
8	M	50	26	95	121	40	42	10	90	13	49	4	9	0	7	9	37	Y
9	M	46	64	165	170	10	12	20	50	76	88	23	29	0	7	53	52	Y
10	M	65	31	45	80	0	10	0	10	16	55	3	27	0	0	13	28	N
11	F	49	89	90	30	0	5	0	-5	30	62	18	30	1	7	11	25	N
12	F	62	25	45	45	40	60	70	90	49	53	15	30	1	2	33	21	N
13	F	56	38	80	20	10	5	5	5	49	15	27	8	0	0	21	7	N
14	F	68	34	60	115	-20	-10	-30	0	15	32	6	13	0	0	9	19	N

Key:

FU = Follow-up months

Pr = preoperative

Po = postoperative

FF = Active forward flexion

ER = Active external rotation

ER90 = Active external rotation at 90 degrees of abduction

PENN = University of Pennsylvania Shoulder Score = maximum of 100 points

P = Pain scale of the PENN score = Maximum of 30 points

F = Function scale of the PENN score = Maximum of 60 points

S = Satisfaction scale of the PENN score = Maximum of 10 points

Do it? = Postoperative patient question = Would you have this surgery again given the result that you attained from the surgery that you had?

Table E2. Postoperative shoulder strength.

#	M/F	Age yrs	FU mos	Po ST	Er in	ER un	IR in	IR un	Abd in	Abd un	Δ w Add
1	M	58	24	46	5.5	9.9	11.4	12.6	6.7	11.1	1
2	M	45	33	34	4.1	12.6	17.6	16.3	4.5	18.6	2.1
3	M	56	35	46	2.6	9.8	15.1	12.2	10.7	11.9	2
4	F	54	33	48	3.2	5	5.6	6	4.7	6.9	0.1
5	M	55	39	48	2.4	7.6	16.6	13.8	7.1	8	2.3
6	M	59	46	36	2.4	6.9	19.5	17.9	3.7	10.5	3.1
7	M	44	33	48	5.9	10	13.5	12.9	14	19.4	0.4
8	M	50	26	34	3.6	9.5	10.2	14.9	5.8	10.1	-0.3
9	M	46	64	36	2.7	10.1	16.8	24.7	12.4	17.8	3.3
10	M	65	31	38	2.7	8.6	10.6	10.5	4.9	10.5	2.6
11	F	49	89	34	0.4	4.2	8.4	4.4	3	5.9	0.7
12	F	62	25	34	1.7	4	3.8	6.1	4	9.7	3.1
13	F	56	38	24	1.2	4.9	6.7	9.9	1.9	10	1.6
14	F	68	34	13	0.9	5.2	4.7	6.8	3.7	8.5	1.2

Key:

FU = Follow-up months

Po ST = Postoperative strength score = Maximum of 60 points

ER in = Postoperative isometric external rotation strength in kg with the arm by the side of the body of the operatively treated shoulder

ER un = Postoperative isometric external rotation strength in kg with the arm by the side of the body of the untreated shoulder

IR in = Postoperative isometric internal rotation strength in kg with the arm by the side of the body of the operatively treated shoulder

IR un = Postoperative isometric internal rotation strength in kg with the arm by the side of the body of the untreated shoulder

Abd in = Postoperative isometric strength in kg in 45 degrees of abduction (plane of the scapula) of the operatively treated shoulder

Abd un = Postoperative isometric strength in kg in 45 degrees of abduction (plane of the scapula) of the untreated shoulder

 Δ w Add = Change in isometric ER strength in kg with isometric adduction of the arm

Table E3. Pre and postoperative EMG data.

#	M/F	Age yrs	FU mos	FF isot	ER 0 isot	ER 0 isom	ER 90 isot	ER 90 isom
1	M	58	24	N	Y	Y	N	Y
2	M	45	33	N	N	Y	N	N
3	M	56	35	N	Y	Y	N	N
4	F	54	33	N	N	Y	N	N
5	M	55	39	N	Y	Y	N	Y
6	M	59	46	N	Y	Y	N	Y
7	M	44	33	N	N	Y	N	N
8	M	50	26	Y	Y	Y	N	N
9	M	46	64	N	Y	Y	N	N
10	M	65	31	N	N	Y	N	N
11	F	49	89	N	N	Y	N	N
12	F	62	25	N	N	Y	N	N
13	F	56	38	N	N	Y	N	N
14	F	68	34	N	N	Y	N	N

Key:

FU = Follow-up months

FF isot = EMG activity of the lat muscle with active forward flexion of the arm

ER 0 isot = EMG activity with active external rotation with the arm by the side

ER 0 isom = EMG activity with isometric external rotation with the arm by the side

ER 90 isot = EMG activity with active external rotation with the arm in 90 degrees of abduction

ER 90 isom = EMG activity with isometric external rotation with the arm in 90 degrees of abduction