

TABLE E-1 Valgus and Posterolateral Rotatory Laxities of the Elbows at the Various Conditions at Three Different Angles of Flexion (Seven Elbows Tested, Ligaments Reattached)

Elbow Condition	Flexion (degrees)	Valgus Laxity* (degrees)		Posterolateral Rotatory Laxity** (degrees)		Dislocation (n) ^E
		mean \pm sd	p ^{\$\$\$}	mean \pm sd	p ^{\$\$\$}	
LUCL refixed (testing model)	10	2.9 \pm 1.1		5.9 \pm 1.3		0
	60	3.8 \pm 1.0		9.0 \pm 2.4		0
	110	2.8 \pm 1.3		8.7 \pm 1.6		0
defect radial head	10	3.7 \pm 0.8	0.25 ^s	10.1 \pm 3.2	0.09 ^s	0
	60	5.3 \pm 2.1	0.17 ^s	18.6 \pm 2.0	<0.0001 ^s	0
	110	3.5 \pm 1.8	0.55 ^s	13.7 \pm 2.9	0.0009 ^s	0
defect 30% coronoid + radial head	10	6.2 \pm 2.0	<0.0001 ^s	18.1 \pm 4.4	<0.0001 ^s	1
	60	13.7 \pm 3.0	<0.0001 ^s	28.7 \pm 3.9	<0.0001 ^s	7
	110	8.7 \pm 1.9	<0.0001 ^s	22.1 \pm 2.3	<0.0001 ^s	6
defect 30% coronoid, rigid prosthesis	10	3.1 \pm 1.2	0.77 ^s	7.9 \pm 1.2	0.2 ^s	0
	60	3.1 \pm 0.6	0.55 ^s	11.4 \pm 2.8	0.18 ^s	0
	110	3.8 \pm 3.0	0.4 ^s	10.6 \pm 2.6	0.18 ^s	0
defect 30% coronoid, floating prosthesis	10	3.6 \pm 1.4	0.33 ^s	11.7 \pm 2.9	0.0007 ^s	0
	60	6.2 \pm 2.3	0.03 ^s	16.9 \pm 4.9	<0.0001 ^s	0
	110	5.1 \pm 2.5	0.05 ^s	15.9 \pm 3	<0.0001 ^s	0
defect 50% coronoid + radial head	10	12.1 \pm 4.0	<0.0001 ^s	24.3 \pm 2.9	<0.0001 ^s	7
	60	19.9 \pm 3.3	<0.0001 ^s	35.6 \pm 3.5	<0.0001 ^s	7
	110	16.7 \pm 3.5	<0.0001 ^s	30.9 \pm 2.0	<0.0001 ^s	7
defect 50% coronoid, rigid prosthesis	10	3.5 \pm 0.9	0.56 ^s	10.4 \pm 3.6	0.1 ^s	0
	60	3.9 \pm 0.9	0.95 ^s	16.0 \pm 4.2	0.0005 ^s	0
	110	2.9 \pm 1.3	0.95 ^s	14.3 \pm 4.3	0.03 ^s	0
defect 50% coronoid, floating prosthesis	10	4.1 \pm 1.4	0.24 ^s	13.6 \pm 3.9	<0.0001 ^s	0
	60	6.1 \pm 1.3	0.03 ^s	20.1 \pm 4.2	0.0001 ^s	0
	110	4.6 \pm 2.4	0.14 ^s	19.6 \pm 4.0	<0.0001 ^s	1
defect 70% coronoid, + radial head	10	14.9 \pm 3.8	<0.0001 ^s	28.6 \pm 5.4	<0.0001 ^s	7
	60	20.4 \pm 3.0	<0.0001 ^s	42.0 \pm 6.8	<0.0001 ^s	7
	110	18.3 \pm 4.0	<0.0001 ^s	30.4 \pm 4.8	<0.0001 ^s	7
defect 70% coronoid, rigid prosthesis	10	4.4 \pm 1.4	0.23 ^s	15.7 \pm 5.1	0.0001 ^s	0
	60	4.2 \pm 1.8	0.68 ^s	22 \pm 5.6	<0.0001 ^s	0
	110	3.6 \pm 1.8	0.54 ^s	18.3 \pm 4.5	<0.0001 ^s	1
defect 70% coronoid, floating prosthesis	10	6.2 \pm 2.8	0.01 ^s	19.3 \pm 4.2	<0.0001 ^s	1
	60	6.9 \pm 1.2	0.005 ^s	26 \pm 3.3	<0.0001 ^s	2
	110	5.7 \pm 1.9	0.03 ^s	23.1 \pm 3.3	<0.0001 ^s	3
coronoid allograft, defect radial head	10	3.1 \pm 2.5	0.77 ^{ss}	14.9 \pm 7.7	0.0005 ^{ss}	1
	60	3.5 \pm 2.6	0.78 ^{ss}	18.9 \pm 5.5	<0.0001 ^{ss}	0
	110	2.6 \pm 3.4	0.85 ^{ss}	16 \pm 6.8	0.0008 ^{ss}	1
coronoid allograft, rigid prosthesis	10	0.9 \pm 0.8	0.01 ^{ss}	4.6 \pm 2.4	0.58 ^{ss}	0
	60	1.9 \pm 1.4	0.07 ^{ss}	6.7 \pm 1.6	0.17 ^{ss}	0
	110	1.1 \pm 1.4	0.15 ^{ss}	7.4 \pm 1.7	0.52 ^{ss}	0
coronoid allograft, floating prosthesis	10	1.4 \pm 1.0	0.05 ^{ss}	8.4 \pm 4.1	0.28 ^{ss}	0
	60	2.2 \pm 1.8	0.12 ^{ss}	9.4 \pm 2.1	0.11 ^{ss}	0
	110	1.2 \pm 1.7	0.17 ^{ss}	10 \pm 2.6	0.79 ^{ss}	1
transfer tip olecranon, defect radial head	10	3.4 \pm 2.5	0.6 ^{ss}	14.9 \pm 5.6	<0.0001 ^{ss}	0
	60	4.7 \pm 3.7	0.5 ^{ss}	21.1 \pm 4.3	<0.0001 ^{ss}	0
	110	4.4 \pm 3.6	0.24 ^{ss}	18.1 \pm 4.3	<0.0001 ^{ss}	1
transfer tip olecranon, rigid prosthesis	10	3.1 \pm 2.0	0.82 ^{ss}	7.1 \pm 2.8	0.51 ^{ss}	0
	60	3.3 \pm 2.3	0.72 ^{ss}	10.1 \pm 4	0.54 ^{ss}	0
	110	2.5 \pm 2.5	0.84 ^{ss}	10.9 \pm 3.4	0.23 ^{ss}	0
transfer tip olecranon, floating prosthesis	10	3.2 \pm 1.9	0.71 ^{ss}	9.3 \pm 3.5	0.08 ^{ss}	0
	60	4.4 \pm 3.0	0.68 ^{ss}	13.3 \pm 3.9	0.03 ^{ss}	0
	110	2.9 \pm 2.9	0.96 ^{ss}	13.7 \pm 3.7	0.008 ^{ss}	0

LUCL = lateral ulnar collateral ligament. *Valgus laxity measured after a valgus torque of 0.825 N-m was applied to the ulna. **Posterolateral rotatory laxity measured after a valgus torque of 0.825 N-m and a supinating torque of 0.75 N-m were applied to the ulna. ^{sss}p values, comparison with the testing model (see text). Due to the Bonferroni correction factor, significance in differences with p value less than 0.005 (^s) or 0.0083 (^{ss}).

^Ecomplete dislocation of ulnohumeral joint.