

TABLE E-1 Indications for Total Elbow Arthroplasty and Revision with Allograft-Prosthesis Composite

Case	Sex	Original Diagnosis	Reason for Revision	No. of Prior Operations*
1	Male	Posttraumatic degenerative joint disease	Failed hardware: broken implant	30
2	Female	Posttraumatic degenerative joint disease	Infection, humeral loosening	7
3	Female	Rheumatoid arthritis	Ulnar loosening	2
4	Male	Neoplasm	Ulnar loosening, ulnar fracture	3
5	Female	Juvenile rheumatoid arthritis	Humeral loosening, ulnar loosening, humeral fracture, ulnar fracture	2
6	Male	Posttraumatic resection arthroplasty	Resection arthroplasty	2
7	Female	Trauma: acute fracture	Ulnar loosening	6
8	Male	Rheumatoid arthritis	Infection, ulnar loosening	7
9	Female	Posttraumatic degenerative joint disease	Infection, ulnar loosening	6
10	Male	Trauma: acute fracture	Infection, humeral loosening, ulnar loosening	4
11	Female	Rheumatoid arthritis	Infection, humeral loosening, ulnar loosening	3
12	Female	Rheumatoid arthritis	Humeral loosening	3
13	Female	Trauma: acute fracture	Humeral loosening, humeral fracture	4
14	Female	Osteoarthritis	Ulnar loosening, ulnar fracture	3
15	Female	Humeral nonunion	Humeral nonunion	2
16	Male	Trauma: acute fracture	Ulnar loosening, ulnar cortical breach	5
17	Female	Rheumatoid arthritis	Humeral loosening, humeral fracture	2
18	Male	Rheumatoid arthritis	Infection, ulnar loosening	9
19	Male	Trauma: acute fracture	Ulnar loosening, ulnar cortical breach	20
20	Female	Trauma: acute fracture	Humeral loosening, ulnar loosening, humeral fracture, ulnar fracture	1
21	Female	Trauma: acute fracture	Ulnar loosening, ulnar fracture	3
22	Female	Rheumatoid arthritis	Humeral loosening, humeral fracture	2
23	Male	Osteomyelitis	Ulnar loosening, ulnar cortical breach	1
24	Female	Rheumatoid arthritis	Infection, ulnar loosening, ulnar fracture	4
25	Female	Trauma: acute fracture	Missing or eroded bone stock, hemiarthroplasty	2

*Staged procedures for debridement or implantation were counted as one.

TABLE E-2 Types of Allograft-Prosthesis Composites and Grafts, and Types and Amounts of Bone Loss

Case	Type of Allograft-Prosthesis Composite	Type of Graft	Type of Bone Deficiency*	Bone Loss (cm)	
				Humerus	Ulna
1	II: ulnar	Ulna	1 H & 1+2 U	2.0	8
2	I: humeral	Humerus	1+2+3 H & 1 U	11.4	2
3	I: ulnar	Fibula	1 H & 1+2 U	2.5	7.4
4	II: ulnar	Fibula	1+2 H & 1+2+3 U	10.2	10.5
5	II: ulnar/II: humeral	Ulna/humerus	1+2+3 H & 1+2+3 U	15.0	10.1
6	II: ulnar	Fibula	1+2+3 H & 1+2+3 U	15.4	11.1
7	I: ulnar	Ulna	0 H & 1+2 U	0.0	10
8	II: ulnar	Ulna	0 H & 1+2 U	0.0	12.3
9	I: ulnar	Fibula	0 H & 1+2+3 U	0.0	10.3
10	I: ulnar	Fibula	0 H & 1+2+3 U	0.0	15.7
11	II: ulnar	Fibula	0 H & 1+2 U	0.0	9
12	II: humeral	Humerus	1+2 H & 1 U	11.4	3
13	I: humeral	Humerus	1+2 H & 1 U	14.8	3
14	I: ulnar	Fibula	0 H & 1+2+3 U	0.0	10.7
15	III: humeral	Humerus	1+2 H & 0 U	8.0	0
16	II: ulnar	Fibula	0 H & 1+2+3 U	0.0	15.4
17	I: humeral	Humerus	1+2+3 H & 1 U	20.4	3.6
18	III: ulnar	Fibula	0 H & 1+2+3 U	0.0	10.8
19	II: ulnar	Fibula	0 H & 1+2 U	0.0	9
20	III: ulnar	Fibula	1 H & 1+2+3 U	4.0	11.4
21	I: ulnar	Fibula	1 H & 1+2+3 U	5.0	10
22	II: humeral	Humerus	1+2 H & 1 U	11.0	3.5
23	II: ulnar	Fibula	0 H & 1+2+3 U	0.0	10.2
24	I: ulnar	Fibula	1 H & 1+2+3 U	3.0	14
25	III: ulnar	Fibula	0 H & 1+2 U	0.0	6.4
*Bone deficiency according to the classification of Mansat et al. ¹⁹ . H = humerus and U = ulna.					