

TABLE E-1 Preoperative and postoperative radiographic data on 25 patients. Surgical procedures included latissimus dorsi and teres major tendon transfers (TT) as well as pectoralis major (PM), subscapularis (S), and biceps (B) musculotendinous lengthenings. During tendon transfer procedures, the latissimus dorsi and teres major tendons were mobilized and sewn directly into the periosteum of the greater tuberosity and the rotator cuff tendinous insertion. Musculoskeletal lengthenings were performed at the proximal myotendinous junction by incising the tendinous fibers, preserving the integrity of the underlying muscle, and ensuring continuity of the muscular origin.

Table E-1. Pre- and post-operative radiographic data

Patient	Age at surgery (months)	Surgery	Radiographic follow-up (months)		Preop		Postop		Change in		Preop	Postop
			Preop glenoid retroversion	humeral head subluxation	Postop glenoid retroversion	humeral head subluxation	glenoid retroversion	humeral head subluxation	deformity type	deformity type		
1	48	TT, PM and B lengthening	30	31	25%	32	18%	1	-7%	4	3	
2	168	TT, PM and B lengthening	24	12	38%	2	50%	-10	13%	2	2	
3	49	TT, PM and B lengthening	37	26	23%	21	35%	-5	13%	3	3	
4	36	TT	64	10	50%	10	33%	0	-17%	2	2	
5	26	TT, PM and B lengthening	24	15	57%	3	58%	-12	1%	2	2	
6	74	TT, PM and B lengthening	26	-3	78%	2	46%	5	-32%	1	1	
7	42	TT, PM and B lengthening	25	12	29%	10	50%	-2	21%	3	2	
8	43	TT, PM and B lengthening	27	38	10%	37	7%	-1	-3%	3	3	
9	38	TT, PM lengthening	83	10	48%	5	45%	-5	-3%	1	1	
10	23	TT, PM lengthening	70	34	0%	28	14%	-6	14%	3	3	
11	57	TT, PM and B lengthening	54	22	33%	19	42%	-3	8%	3	2	
12	25	TT	80	10	43%	-8	50%	-18	7%	2	1	
13	34	TT, PM and B lengthening	30	33	11%	40	30%	7	19%	3	3	
14	25	TT, PM and B lengthening	28	12	13%	38	11%	26	-2%	4	4	
15	24	TT, S and PM lengthening	121	12	50%	-8	66%	-20	16%	2	1	
16	24	TT, PM and B lengthening	24	28	0%	19	46%	-9	46%	4	2	
17	33	TT, PM lengthening	59	23	41%	8	54%	-15	13%	2	2	
18	33	TT, PM and B lengthening	36	17	47%	12	42%	-5	-5%	2	2	
19	27	TT, PM and B lengthening	24	45	19%	27	28%	-18	9%	3	3	
20	40	TT, PM lengthening	41	28	25%	10	37%	-18	12%	3	2	
21	63	TT, PM and B lengthening	24	0	46%	-4	61%	-4	15%	2	2	
22	21	TT, PM and B lengthening	24	33	0%	34	20%	1	20%	4	3	
23	14	TT, PM and B lengthening	31	30	0%	22	29%	-8	29%	4	3	
24	34	TT, PM and B lengthening	27	25	32%	23	21%	-2	-11%	3	3	
25	36	TT, PM and B lengthening	68	44	27%	31	30%	-13	3%	4	3	
averages	42		43	22	30%	16.5	37%	-5.4	7%	2.8	2.3	

Table E-2. Classification of glenohumeral deformity in brachial plexus birth palsy.

<u>Classification</u>	<u>Features</u>
Type I	<5 degree difference in retroversion compared with unaffected shoulder
Type II	>5 degree difference in retroversion, minimal posterior humeral head subluxation
Type III	posterior humeral head subluxation with <35% of head anterior to axis of scapula
Type IV	severe deformity, including presence of false glenoid
Type V	severe flattening of humeral head and glenoid, with posterior glenohumeral dislocation
Type VI	infantile posterior glenohumeral dislocation
Type VII	proximal humeral growth arrest




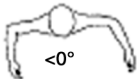
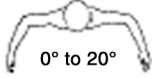
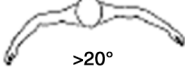









	Grade II	Grade III	Grade IV
Global abduction	 <30°	 30° to 90°	 >90°
Global external rotation	 <0°	 0° to 20°	 >20°
Hand to neck	 Not possible	 Difficult	 Easy
Hand on spine	 Not possible	 S1	 T12
Hand to mouth	 Marked trumpet sign	 Partial trumpet sign	 <40° of abduction

Fig. E-1

Schematic representation of the modified Mallet classification of active shoulder function of patients with brachial plexus birth palsy. Grade I denotes no active motion, and grade V denotes normal function (equal to that on the contralateral side). Aggregate Mallet scores are calculated by summing the grades for the five individual elements (range of scores, 5 to 25 points).