PP-14

미니 광배근 피판과 확장 광배근 피판을 이용한 유방재건술 후 신체 기능 회복 및 삶의 질 비교

(Comparison of Physical and Functional Recovery and Quality of Life between Mini- and Extended Latissimus Dorsi Breast Reconstruction)

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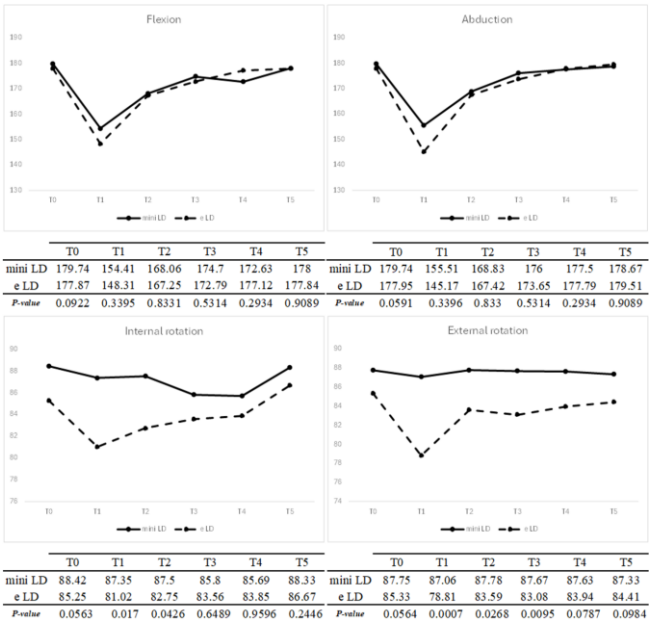
Purpose: The mini latissimus dorsi (LD) flap was developed as an adaptation of the conventional LD flap with reduced muscle dissection. In this study, we evaluated shoulder function and quality of life prospectively after breast reconstruction with the conventional extended and mini LD flap.

Methods: Range of motion was evaluated preoperatively and at five postoperative intervals: week 2, week 6, month 3, month 6, and month 12. Functional disability and quality of life were measured using the Disabilities of the Arm, Shoulder, and Hand (DASH) questionnaire and the 36-Item Short-Form Health Survey (SF-36) at the same intervals.

Results: Most range-of-motion parameters recovered nearly to preoperative levels at postoperative month 3. For internal and external rotation, the mini LD flap group consistently showed greater range of motion than the extended LD flap group. Functional disability, as measured by the DASH questionnaire, significantly increased following latissimus dorsi flap surgery. The mental and physical components of the SF-36 improved over time beginning at postoperative week 2.

Conclusion: At 1 year postoperatively, both the mini and extended LD flap groups demonstrated recovery of range of motion and SF-36 scores to levels comparable to baseline. However, the mini LD flap group showed less limitation in range of motion and higher SF-36 scores at most postoperative time points compared with the extended LD flap group, with statistically significant differences observed in internal and external rotation. These findings indicate that a greater extent of latissimus dorsi muscle harvest may be associated with increased limitation in internal and external rotation.



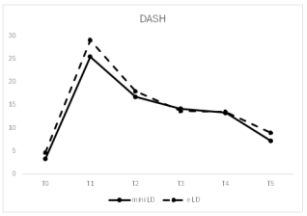
	T0	T1	T2	T3	T4	T5
mini LD	179.74	154.41	168.06	174.7	172.63	178
e LD	177.87	148.31	167.25	172.79	177.12	177.84
P-value	0.0922	0.3395	0.8331	0.5314	0.2934	0.9089

	T0	T1	T2	T3	T4	T5
mini LD	179.74	155.51	168.83	176	177.5	178.67
e LD	177.95	145.17	167.42	173.65	177.79	179.51
P-value	0.0591	0.3396	0.833	0.5314	0.2934	0.9089

	T0	T1	T2	T3	T4	T5
mini LD	88.42	87.35	87.5	85.8	85.69	88.33
e LD	85.25	81.02	82.75	83.56	83.85	86.67
P-value	0.0563	0.017	0.0426	0.6489	0.9596	0.2446

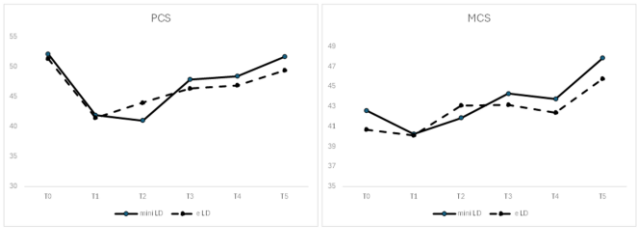
	T0	T1	T2	T3	T4	T5
mini LD	87.75	87.06	87.78	87.67	87.63	87.33
e LD	85.33	78.81	83.59	83.08	83.94	84.41
P-value	0.0564	0.0007	0.0268	0.0095	0.0787	0.0984

Fig. 1. Range of motion (ROM). A physiotherapist evaluated arm and shoulder function by measuring shoulder range of motion.



	T0	T1	T2	T3	T4	T5
mini LD	3.26	25.43	16.76	14.13	13.31	7.18
e LD	4.6	29.02	17.96	13.7	13.47	8.95
P-value	0.3511	0.4881	0.7441	0.9047	0.9617	0.6957

Fig. 2. DASH Scores. The Disabilities of the Arm, Shoulder and Hand (DASH) questionnaire was used to evaluate the impact of upper limb disability on daily activities.



	T0	T1	T2	T3	T4	T5
mini LD	52.07	41.87	40.97	47.82	48.35	51.61
e LD	51.28	41.41	43.98	46.34	46.83	49.35
P-value	0.6256	0.8429	0.1369	0.3657	0.5204	0.923

	T0	T1	T2	T3	T4	T5
mini LD	42.59	40.24	41.84	44.29	43.74	47.84
e LD	40.67	40.1	43.09	43.15	42.37	45.77
P-value	0.4895	0.9724	0.7145	0.7384	0.5884	0.9843

Fig. 3. SF-36 Scores. The 36-Item Short-Form Health Survey (SF-36) assesses health-related quality of life across eight domains, which are divided into two summary scales: the physical component summary (PCS) and the mental component summary (MCS).