

Dynamic Stabilization of the Scapula for Serratus Anterior Dysfunction

관동의대 명지병원 정형외과학교실,
Harvard Shoulder Service, Massachusetts General Hospital, Boston

정수태 · Jon J.P. Warner

Twenty-six patients (12 male and 14 female) with symptomatic scapular winging caused by serratus anterior dysfunction were managed with split pectoralis major tendon transfer (sternal head) with autogenous hamstring tendon augmentation from 1998 to 2006.

Twenty-five patients had positive results for long thoracic nerve palsy on electromyography. The mean duration of symptoms until surgery was 48 months (range 12~120 months). Four patients had non-traumatic etiologies and twenty-two patients had traumatic etiologies.

At the final follow-up assessment for functional improvement, a Constant-Murley score was used. 21 patients were completely evaluated, while 5 patients who had less than 12 months follow-up were excluded. Pain relief was achieved in 19 of the 21 patients, with twenty patients showing functional improvement. The pain scores improved from 6.0 preoperatively to 1.8 postoperatively. The mean active forward elevation improved from 108° (range 20°~165°) preoperatively to 151° (range 125°~170°) postoperatively. The mean Constant-Murley score improved from 57.7 (range 21~86) preoperatively to 86.9 (range 42~98) postoperatively. A recurrence developed in one patient. Of the twenty-one patients, eight had excellent results, nine had good results, three had fair results, and one had poor results. Most patients with severe symptomatic scapular winging had functional improvement and pain relief with resolution of scapular winging.