

Splinting after carpal tunnel release: does it really matter?

ABSTRACT

Splinting of the wrist after carpal tunnel release (CTR) has been practised by many surgeons especially in North America. The main reason was to prevent possible adverse events of bowstringing of flexor tendons and the median nerve, pillar pain, entrapment of the median nerve in scar tissue and wound dehiscence. Studies on the effect of splinting after standard CTR have had dismal results. The duration of splinting in standard CTR has been either too long (for 2-4 weeks) or too short (48 hours only). The aim of our study was to compare the effects of post-operative splinting for a duration of one week with no splinting. Methods: All 30 of our patients underwent a standardized limited open CTR by a designated surgeon. Post operatively, they were randomized into a splinted (n=16) and a nonsplinted (n=14) group. The splint was kept for a week. Patients were reviewed at regular intervals of one week, two months and six months. At each follow up, these patients were clinically assessed for the following outcome measures: VAS (visual analogue score), 2PD (two-point discrimination), pinch grip, grip, Abductor Pollicis Brevis (APB) power and completion of the Boston questionnaire. Results: All patients presented with significant improvement in the postoperative evaluation in the analyzed parameters within each group. However, there was no significant difference between the two groups for any of the outcome measurements at sequential and at final follow-up. Conclusion: We conclude that wrist splinting in the immediate post-operative period has no advantage when compared with the unsplinted wrist after a limited open carpal tunnel release.

Keyword: Carpal tunnel syndrome; Carpal tunnel release; Wrist splint; Limited open carpal tunnel release; Nerve compression