
Splinting versus non-splinting following Carpal Tunnel release for Carpal Tunnel Syndrome Treatment

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Summary

Carpal tunnel release for decompression of the median nerve at the wrist is one of the most simple, common and successful procedures in hand surgery. Complications, though rare, are potentially devastating and may include intraoperative technical errors, postoperative infection, painful scar, median nerve injury and persistent or recurrent symptoms.¹

To improve the functional outcomes and prevent the above complications, many surgeons especially in North America do a splint of the wrist after carpal tunnel release.³

There are no available valid data or study materials to support that post-operative splinting benefits these theoretical advantages. Others advocate early movement to promote longitudinal gliding of the nerve through the surgical bed. In addition, it has been suggested that post-operative splinting caused a significant delay in return to work or activities of daily living.⁴

In our study, 40 patients with idiopathic carpal tunnel syndrome with failed conservative methods were enrolled. Patients were divided in 2 groups, Group I without splint post-operative while group II with splint for 3 weeks. We then followed up the functional outcomes of both groups by VAS score, quick DASH score, Boston score, grip strength and improvement in night pain.

Our study results illustrated that wrist immobilization in the first three post-operative weeks using a below elbow volar splint is useful in decreasing pain but has no other significant advantages in the functional outcomes when compared with immediate post-operative range of motion after open carpal tunnel release surgery.