



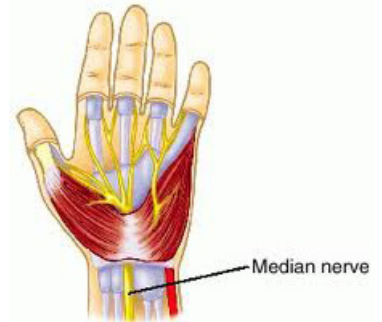
IN TOUCH Hand Therapy **HANDout #1**

HAND THERAPY FOR CARPAL TUNNEL SYNDROME

Carpal tunnel syndrome is the most common peripheral neuropathy; occupations that include highly repetitive tasks, forceful work and a combination of hand and wrist vibration have been shown to give an increased risk of developing the condition. Industries shown to be particularly prone to this include construction, poultry and fish processing workers, food preparation, product fabrication, garment manufacture and nursing home workers amongst others. Symptoms can include tingling or numbness involving thumb and index/middle fingers, worse at night. Weakness of pinch and clumsiness.

Hand therapy can offer effective treatment for carpal tunnel syndrome, both in the initial stages, and with any ongoing complications post surgery if this becomes necessary.

- Night splints: hold the wrist in a position where there is least pressure within the carpal tunnel. They should be worn for between 6 weeks and 3 months if proving effective. Daytime splint can be helpful if symptoms are present with work tasks or at times during the day.
- Nerve gliding techniques and exercises have shown to move the median nerve by up to 5mm within the carpal tunnel. Nerve glides are used to improve movement of the nerve with the tunnel, and reduce intraneural oedema.
- Ergonomic advice about grip techniques, handle sizes, micropauses, general upper limb stretches and improving cervical and scapular posture can be helpful in overall management.
- Ultrasound and carpal bone mobilisations have also been shown to be of significant benefit.



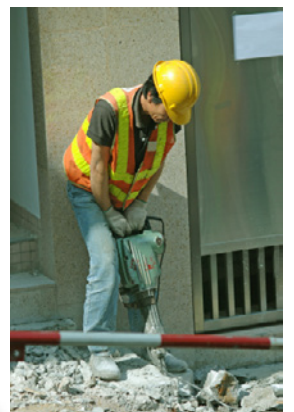
THERAPY FOLLOWING CARPAL TUNNEL RELEASE

A recent study found that patients achieved maximal improvement 9 months after carpal tunnel release, although up to a quarter of these patients changed to lighter work. The median time taken to return to work was 5 weeks.

Common complications in the early stages include tender scars (19%), pillar pain (4%) and reduced grip strengths in over 50%.

Hand therapy can help in all these areas:

- Scar tenderness and pillar pain respond well to massage, ultrasound and application of silicone gel at night. Acupuncture has also been used to reduce the discomfort of painful scars.
- Nerve and tendon gliding exercises to improve movement of structures under the scar whilst healing takes place.
- Strengthening programmes designed specifically to the patients work and recreational needs can help gradually overcome the reduced pinch and grip strengths post surgery.
- Anti vibration gloves and work specific hand splints can be a helpful adjunct.
- Advice about alternative work and functional techniques and graduated return to work plans can also be provided, whilst waiting for strength to return.



www.patient.co.uk/doctor/Median-Nerve-Lesions-and-Carpal-Tunnel-Syndrome.htm

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