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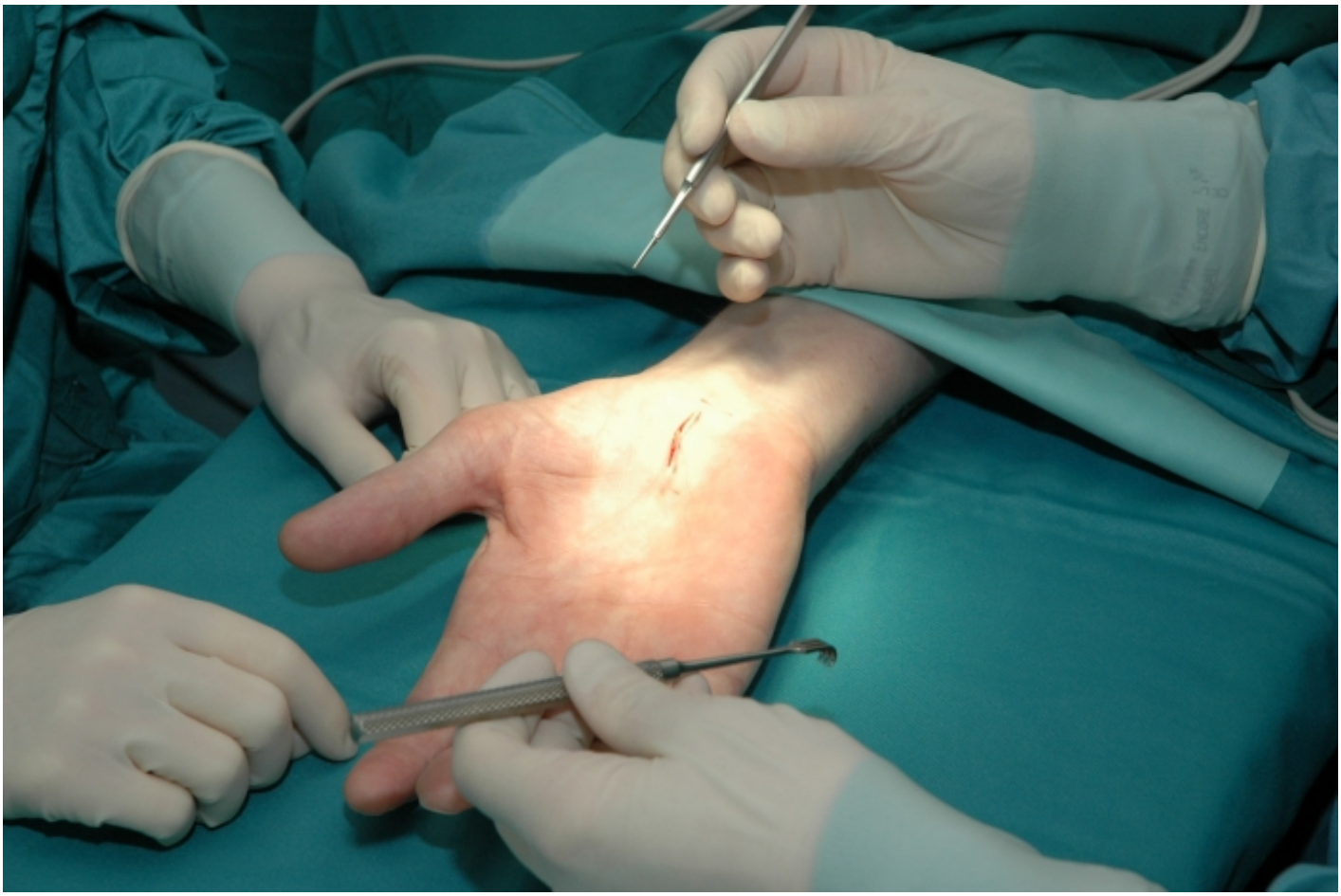

Musculoskeletal

Carpal Tunnel Syndrome

Physiotherapy vs. surgery for Carpal Tunnel Syndrome (CTS)

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CTS is caused by compression of the median nerve at the carpal tunnel and has a prevalence ranging from 6.3% to 11.7%. It results in substantial social burdens. Documentation of the effect of surgical or conservative options are conflicting. CTS may be seen as a peripheral neuropathy, however evidence is now suggesting that it may possibly represent a complex pain syndrome, also including sensitisation.

PT patients received three treatment sessions over a period of three weeks. Treatment consisted of soft tissue mobilization and nerve/ tendon gliding exercises including manual techniques directed at probable anatomical entrapment sites of the median nerve. Lateral glides to the cervical spine, tendon and nerve gliding interventions were also included in the treatments applied. No pain was produced during the techniques. The final treatment included an instruction on doing the tendon and nerve gliding exercises as homework. The surgery group underwent open or endoscopic decompression and release of the carpal tunnel. Surgery and PT presented similar outcomes on pain and function at 6 and 12 months. Patients receiving PT experienced significantly greater relief of symptoms and improvements in hand function in the short term at 1 and 3 months. Significant and clinically important improvements from baseline to follow-up periods, particularly at 6 and 12 months were experienced in both groups, with non-significant differences between the two groups at 12 months. This supports the use of conservative treatment as first management option.

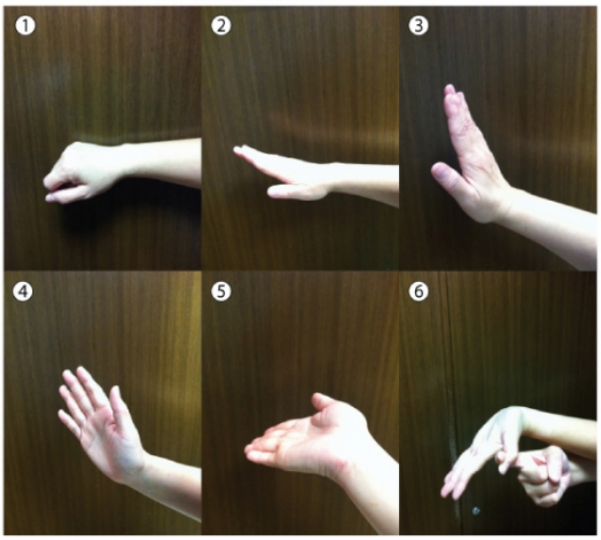

Figure 2 - Median Nerve Mobilisation: 1.Wrist neutral with fingers and thumb flexed. 2. Wrist neutral with fingers and thumb extended 3. Wrist and fingers extended, thumb neutral 4. Wrist, fingers, and thumb extended 5.Wrist, fingers, thumb extended and forearm supinated 6.Wrist, fingers, thumb extended, forearm supinated and thumb stretched into extension.