

PELAKSANAAN FISIOTERAPI PADA KASUS *CARPAL TUNNEL SYNDROME DEXTRA*

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Abstrak

LatarBelakang: *Carpal Tunnel Syndrome* (CTS) merupakan kondisi klinis yang disebabkan oleh penekanan saraf medianus saat melewati terowongan karpal di pergelangan tangan. Penyakit ini sering terjadi akibat gerakan berulang yang membebani pergelangan tangan, seperti mengetik, menggunakan mouse, atau pekerjaan yang menuntut aktivitas manual terus-menerus. **Tujuan:** Penelitian ini bertujuan untuk mengevaluasi efektivitas intervensi fisioterapi berupa modalitas terapi dan latihan fungsional pada pasien dengan CTS. **Metode:** Penelitian dilakukan dengan pendekatan studi kasus pada seorang pasien perempuan usia 45 tahun dengan keluhan nyeri, kesemutan, dan penurunan kekuatan genggam tangan kanan. Intervensi fisioterapi diberikan selama 6 kali pertemuan yang mencakup penggunaan *Transcutaneous Electrical Nerve Stimulation* (TENS), terapi *ultrasound*, dan latihan peregangan serta penguatan otot. Evaluasi dilakukan terhadap nyeri menggunakan skala *Visual Analog Scale* (VAS), kekuatan otot menggunakan *Manual Muscle Testing* (MMT), dan kemampuan fungsional dengan kuesioner *Patient Rated Wrist Evaluation* (PRWE). **Hasil:** Hasil menunjukkan adanya penurunan nyeri dari VAS 6 menjadi 2, peningkatan kekuatan otot pergelangan tangan dari MMT 3 menjadi MMT 4, serta perbaikan fungsi tangan berdasarkan skor PRWE. **Kesimpulan:** Intervensi fisioterapi terbukti memberikan dampak positif dalam mengurangi gejala CTS dan meningkatkan fungsi tangan pasien.

KataKunci : *Carpal Tunnel Syndrome*, fisioterapi, *TENS*, terapi *ultrasound*, latihan penguatan, nyeri tangan, rehabilitasi fungsional.

IMPLEMENTATION OF PHYSIOTHERAPY IN CARPAL TUNNEL SYNDROME CONDITION

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Abstract

Background: Carpal Tunnel Syndrome (CTS) is a clinical condition caused by compression of the median nerve as it passes through the carpal tunnel in the wrist. This condition often occurs due to repetitive movements that strain the wrist, such as typing, using a mouse, or performing tasks that demand continuous manual activity. **Purpose:** This study aims to evaluate the effectiveness of physiotherapy interventions, including therapeutic modalities and functional exercises, in patients with CTS. **Method:** This research was conducted using a case study approach on a 45-year-old female patient who presented with complaints of pain, tingling, and decreased grip strength in the right hand. Physiotherapy interventions were administered over six sessions, consisting of Transcutaneous Electrical Nerve Stimulation (TENS), ultrasound therapy, stretching, and strengthening exercises. Assessments were conducted for pain using the Visual Analog Scale (VAS), muscle strength using Manual Muscle Testing (MMT), and hand function using the Patient Rated Wrist Evaluation (PRWE). **Results:** The results showed a reduction in pain from VAS 6 to 2, an improvement in wrist muscle strength from MMT grade 3 to grade 4, and enhanced hand function based on PRWE scores. **Conclusion:** Physiotherapy interventions proved effective in reducing CTS symptoms and improving hand function.

Keywords : Carpal Tunnel Syndrome, physiotherapy, TENS, ultrasound therapy, strengthening exercises, hand pain, functional rehabilitation.