



ABSTRAK

**FAKULTAS FISIOTERAPI
UNIVERSITAS ESA UNGGUL
SKRIPSI, FEBRUARI 2015**

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2013-66-135

“INTERVENSI ULTRASOUND DAN NEURAL MOBILIZATION LEBIH BAIK DIBANDINGKAN DENGAN LASER DAN NEURAL MOBILIZATION UNTUK MENURUNKAN DISABILITAS PADA KASUS CARPAL TUNNEL SYNDROME”

Terdiri VI Bab, Halaman, Tabel, Gambar, Grafik, Lampiran

Tujuan : Untuk mengetahui ultrasound dan neural mobilization lebih baik dibandingkan dengan laser dan neural mobilization untuk menurunkan disabilitas pada kasus carpal tunnel syndrome. **Sampel :** Sampel terdiri dari 20 orang dengan usia antara 21-60 tahun. Penelitian dilakukan di bagian Fisioterapi RS Santo Borromeus Bandung. Pada penelitian ini dibagi dua kelompok yaitu kelompok perlakuan 1 diberikan ultrasound dan neural mobilization sedangkan kelompok perlakuan 2 diberikan laser dan neural mobilization. **Metode :** Penelitian ini merupakan eksperimental dimana pengukuran disabilitas tangan menggunakan *Wrist and Hand Disability Index* (WHDI). Untuk uji normalitas menggunakan analisa statistik *Saphirowilk test* dan uji homogenitas varian dengan *Levene's test*. Hasil : Adapun hasil uji paired sample T-test pada kelompok perlakuan 1 dengan $p\text{-value}=0,001$ ($p<0,05$) berarti H_0 ditolak sehingga ada penurunan disabilitas dengan ultrasound dan neural mobilization pada CTS. Pada uji paired sample T-test kelompok perlakuan 2 dengan $p\text{-value}=0,001$ ($p<0,05$) berarti H_0 ditolak sehingga ada penurunan disabilitas dengan laser dan neural mobilization pada CTS. Pada uji T-test independent didapatkan hasil $p\text{-value}=0,001$ ($p<0,05$) sehingga H_0 ditolak yang berarti bahwa penggunaan ultrasound dan neural mobilization lebih baik terhadap penurunan disabilitas pada CTS. Kesimpulan : intervensi ultrasound dan neural mobilization lebih baik dibandingkan laser dan neutral mobilization untuk menurunkan disabilitas pada kasus CTS.

Kata kunci : *ultrasound-neural mobilization, laser-neural mobilization, carpal tunnel syndrome, wrist and hand disability index*



ABSTRACT

**PHYSICAL THERAPY FACULTY
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2013-66-135

**“ULTRASOUND INTERVENTION AND NEURAL MOBILIZATION
BETTER USED WITH LASER AND NEURAL MOBILIZATION
DISABILITIES TO REDUCE THE CASE CARPAL TUNNEL
SYNDROME ”**

Consists VI Chapter, Page, Table, Image, Graphics, Annex

Objective: To determine the *ultrasound* and *neural mobilization* is better than the laser and *neural mobilization* to reduce disability in cases of carpal tunnel syndrome. Sampel: The sample consisted of 20 people with ages between 21-60 years. Research carried out at the Physiotherapy RS Santo Borromeus Bandung. In this study, divided into two groups: one group was given ultrasound treatment and neural mobilization while the 2 treatment groups were given laser and neural mobilization. Metode: This study is an experimental measurement of disability where hand using *Wrist and Hand Disability Index (WHDI)*. To test for normality using statistical analysis *Saphirowilk test* and homogeneity of variance test with the *Levene's test*. Results: The test results *paired sample T-test* in treatment group 1 with a p-value = 0.001 ($p < 0.05$) means that H_0 is rejected so that there is a decrease in disability with *ultrasound* and *neural mobilization* on *Carpal Tunnel Syndrome (CTS)*. In the *paired samples T-test 2* treatment groups with a p-value = 0.001 ($p < 0.05$) means that H_0 is rejected so that there is a decrease in disability with laser and *neural mobilization* on CTS. T-test on independent test results obtained p-value = 0.001 ($p < 0.05$) so that H_0 is rejected, which means that the use of *ultrasound* and better *neural mobilization* to decrease disability in CTS. **Conclusion** : intervention *ultrasound* and *neural mobilization* better than laser and *neural mobilization* to decrease disability on CTS.

Keywords: *ultrasound-neural mobilization, laser-neural mobilization, carpal tunnel syndrome, wrist and hand disability index*