

The Effect Tens and US Therapy to Decrease the Pain of Frozen Shoulder

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ABSTRACT

Background : Frozen Shoulder is a condition that causes shoulder joint motion to be very limited. Conditions of severity in frozen shoulder vary from mild to severe pain. Frozen shoulder attacks 2% of the population between the ages of 40 - 60 years and the proportion of cases in women is higher. The prevalence of frozen shoulder cases is estimated to be 2-5% of the general population and the risk is increased in non-dominant shoulders. Studies say 40% of patients experience moderate pain for approximately 2-3 years and 15% of these cases have long-term disability. **Objective :** To determine the effectiveness of the administration of a combination of TENS (Transcutaneous Electrical Nerve Stimulation) and US (Ultrasound) therapy on the degree of pain in frozen shoulder patients. **Method :** This research uses observational analytic method with cross sectional approach which is tested for statistical analysis using the Wilcoxon test. The data obtained are from medical records and structured interviews in November 2019 - February 2020 at the Roemani Muhammadiyah Hospital Semarang Medical Rehabilitation Installation. **Results :** The case study subjects were frozen shoulder patients aged 40 - 65 years who met the inclusion criteria. The sample in this study amounted to 34 respondents, with a total of 32 respondents included in the inclusion criteria, and the rest included in the exclusion and drop out criteria. Based on the results of the analysis obtained the effect of the administration of Transcutaneous Electrical Nerve Stimulation (TENS) and Ultrasound (US) ($p = 0.002$) on the reduction in pain degrees of frozen shoulder patients. **Conclusion :** There is a significant relationship between the administration of Transcutaneous Electrical Nerve Stimulation (TENS) and Ultrasound (US) therapy with a decrease in the degree of pain in frozen shoulder patients.

Keywords : TENS, US, Frozen Shoulder