The effect of biogel using biomagnetic energy in the treatment of acute pain in the upper extremity and spine: A randomized controlled trial

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Compliance with ethical requirements

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ABSTRACT

Background: Pain is a public health problem caused by various etiological factors, leading to a decrease in quality of life and workforce. Medications taken for therapeutic purposes do not always give the desired result, which causes patients to seek different methods. Many traditional and complementary medicine methods, especially Chinese Medicine Acupuncture, have been used in the treatment of pain from past to present. In this study, it was aimed to determine whether the biogel formed by using trace elements and amino acids of Gold, Platinum, Silver and other semi-precious metal minerals processed with nano technology has an effect in the treatment of pain.

Methods: Patients who applied to Orthopedics/Traumatology and Family Health Centers due to acute pain in the upper extremity and/or trunk were divided into two groups as treatment and placebo by randomization method. Non-invasive Biogel application (Biomagnetic Compress gel, Biogely^{TM}) was applied to the patients in the treatment group for 10 minutes. Non-invasive placebo application (empty liquid without any substance) was applied to the control group for 10 minutes. Demographic data of the patients, pain area and severity, mean arterial pressure before and after the application, Visual analogue scale (VAS) and Nottingham Health Profile (NHP) total and NHP-pain (NHP-P) subscale scores were obtained. Then, the obtained data were statistically compared between and within groups.

Results: In the Biogel group, post-treatment NHP-P values were statistically significantly lower than pre-treatment NHP-P values (P<0.001). NHP-P values before and after treatment in the placebo group were not significantly different (P>0.05). In the Biogel group, post-treatment VAS scores were statistically significantly lower than pre-treatment VAS scores (P<0.001). VAS scores before and after treatment in the placebo group were not significantly different (P>0.05). In the Biogel treatment group, the majority of the patients (80%) stated that they benefited from the Biogel treatment.

Conclusion: We think that Biogel can be used as a complementary medicine method in the treatment of acute pain in the upper extremity and/or trunk. Such complementary medicine practices that focus on pain management can reduce the burden of disease and possibly reduce costs.

Keywords: pain; biogel; complementary medicine; traditional medicine; integrative medicine