

## **Hand pain is reduced by massage therapy plus Biofreeze® Topical Analgesic**

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**Objective:** This study was conducted to determine whether there are any added effects of applying Biofreeze® after massage therapy for reducing hand pain.

**Background:** Massage therapy has been noted to reduce hand pain and increase grip strength. Because Biofreeze also reduces pain, applying Biofreeze after massage therapy was expected to further reduce hand pain.

**Methods:** 20 healthy adults who were experiencing hand pain were randomly assigned to a massage therapy or a massage therapy plus Biofreeze application group. Both groups received a weekly 10-minute massage from a massage therapist and were taught the same massage to be done by each participant once daily over a 4 week period. The participants in the massage plus Biofreeze group were given a week's supply of Biofreeze 5 gram gel packets so they could apply the gel at the end of each of their self-massage sessions. Each participant was also given a DVD of the massage therapy protocol.

**Results:** Based on repeated measures ANOVAs and post hoc Bonferroni t-tests, the massage plus Biofreeze group had significantly greater improvement (all  $p$ 's < .05) in grip strength as measured by a Maxi Aids Digital Hand Exerciser following the first session and by the end of the 4 week period. That group also had a greater increase in perceived grip strength and a greater decrease in hand pain over the 4-week period. Other problems that often result from pain including depressed mood and sleep disturbances also decreased.

**Conclusion:** Adding Biofreeze to a massage therapy protocol results in a greater decrease in hand pain and a greater increase in grip strength than massage therapy alone. These findings demonstrate the added value of using Biofreeze following massage therapy for individuals with hand pain.