

Patient Perceptions of Pain Before and After Cupping

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ABSTRACT

Cupping is an ancient modality that has many benefits. Benefits include improving blood flow, decreasing pain, and increasing function to the applied (Cage et. al., 2020). Research has shown that cupping and its effectiveness can be manipulated by perceptiveness and perceived thoughts about the modality itself, by the clinician and patient (Cage et. al., 2020, Silva et. al. 2019). **PURPOSE:** The purpose of this study was to collect data that will assist in making clinical decisions regarding cupping as a therapy. The research question that this study aims to answer is: Does cupping therapy decrease patient-reported pain due to injury? The ensuing research examines different aspects of perceived pain before and after cupping, type of injury, type of cupping treatment, time and type of pain. **METHODS:** The method used included a researcher-designed survey. The survey was taken twice, once before and once after treatment. The pre-treatment survey asked for demographic information including: participants' age, race and ethnicity, injury site, duration of injury, type of pain, and sport participation. The survey included Likert scales that were rated from 0-5. The pre-treatment Likert question asked about current pain levels. During the second survey, the participants were only asked about pain during treatment, helpfulness of the treatment, and pain scale after the treatment, with no demographic questions.

RESULTS: The survey resulted in 44 responses, for a total participation of 22 participants. Cupping was used for many different injuries across different sports. Cupping was predominantly used for tightness (81.8%). Moreover, it was also used for tendonitis and strains (9%) and other unlisted injuries (9%). Injury site was also observed with back (54.5%) and shoulder (18%) observed the most. Time with the injury was shown that most injuries had been bothering the athlete for four or more weeks (36%). Track and football utilized cupping the most, at 36% each. Two-tailed paired samples t-test showed that there was an increase in pain after cupping was used. The result of the two-tailed paired samples t-test was significant based on an alpha value of .05, $t(21) = -4.12$, $p < .001$. This finding suggests the difference in the mean of pre-treatment pain levels and the mean of post-treatment pain levels were significantly different from zero. The mean of the pre-treatment pain level datum was significantly lower than the mean of the post-treatment pain level datum. There was not a significant difference in pain during treatment between fire and suction cupping. Time duration of injury did not have a significant impact on pain levels before or after treatment. Type of pain also had no significant correlation to pain levels. **CONCLUSION:** Cupping is a treatment that is used best when in combination with a proper rehabilitation program. While both fire and suction cupping were observed, suction cupping was used the most (72.3%). Patient-reported pain levels were significantly higher post-treatment. This is interesting as it was thought that cupping would help alleviate pain. Further research needs to be done to examine if pain levels decrease hours or days after treatment instead of directly after treatment.