Prospective Investigation on Hip Adductor Strains Using Myofascial Release

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BACKGROUND There is a significant paucity of research into the therapeutic effects of ART\textsuperscript{®}, although several N=1 case studies have documented improved ranges of motion, return to work or athletic play, and reduction in symptomatology. Pain pressure thresholds have yet to be investigated as the primary outcome measure when ART\textsuperscript{®} is used as a soft tissue intervention to treat myofascial pathology, specifically adductor strains. Therefore, research warrants investigation into the therapeutic effect ART\textsuperscript{®} has on pain relief of adductor strains, a common injury in hockey.

METHODS Screened subjects with adductor strain were provided with ART\textsuperscript{®} commensurate with the extent and nature of their injury. Pain pressure thresholds (PPT) were recorded pre and post intervention using a hand held bubble pressure algometer. Follow-up measurements were conducted across the duration of the treatment plan. Myofascial release was administered to the adductor complex, as identified by palpation screening for altered tissue texture.

RESULTS The pre- and post-treatment pain pressure threshold (PPT) values for the subjects are found in Figure 1. The within group analysis revealed a mean pretreatment and post-treatment PPT value of 4.24 \pm 0.84 and 6.10 \pm 0.47 respectively. There was a significant difference between pretreatment and post-treatment PPT values (t = 7.65, 8 df, p<.0001).

CONCLUSION A significant difference exists between pre and post measurements of pressure pain thresholds of the adductor longus strains treated. These findings agree with a previous study\textsuperscript{1,2} which concluded that manual pressure release decreased sensitivity to myofascial trigger points. The reduction in perceived pain and significant increase in tolerance to treatment pressure appeared to be caused by a change in tissue sensitivity. This study demonstrates the positive effect of manual fascial release. Further investigation is required to elaborate on the mechanism of effect.

REFERENCES