Compression Forces Associated with Selected Massage Therapy Techniques

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PURPOSE To better understand the differences between six basic Swedish massage therapy techniques – effleurage, petrissage, friction, compression, vibration, and tapotement [1, 2] – and to support future research into the physiological changes of muscle tissue caused by massage therapy. Limited research is available on the basic mechanics and forces associated with massage therapy techniques [3, 4].

METHODS Currently licensed massage therapists, with a minimum of one year experience, were recruited to perform selected Swedish massage therapy techniques on a force transducer representing a target tissue. The transducer, sampling at 1000 Hz frequency and interfaced with a computerized data acquisition system, collected force curves associated with respective massage techniques. Throughout testing, the order of the six techniques was mixed and randomized to minimize order effects [5]. When executing each of the repeated techniques, subjects were instructed to perform the technique with their lightest force, moderate force, and the highest force they typically utilized. This data allowed researchers to examine both the mean force (N) associated with typical application of each technique, and the range of forces that were associated with each technique. For all techniques, the force transducer was positioned on a table at a height comfortable for the participant and represented typical positioning for performing a standard massage therapy session. One-way repeated measures ANOVA and appropriate post-hoc tests were utilized for data analysis.

RESULTS To be presented. Data collection ends January 2011.

CONCLUSIONS To be presented.

REFERENCES