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Student Abstract

The Use of Kinesio Tape with a Strengthening Protocol in aiding Scapular Retraction through Facilitation of the Rhomboids

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CONTEXT

Rounded shoulder posture (RSP) is a type of poor upper body posture that can lead to other biomechanical changes of the body, as well as pathological issues.¹⁻³ Kinesio Tape (KT) facilitation, along with a strength protocol, on the rhomboid muscles will aid in scapular retraction.

OBJECTIVE

To examine immediate effects of KT facilitation of the rhomboid muscles as well as postural changes, over time, when KT facilitation is combined with a strength protocol on the rhomboid muscles.

DESIGN

Repeated measures, randomized experimental study.

SETTING

Division III liberal arts college.

PARTICIPANTS

11 participants with RSP (6 male, 5 female, age 28.8 ± 13.0 years).

INTERVENTION

Pre-Test performed that included 3 exercises, 3 sets of 10 reps each, followed by the application of KT on the rhomboid muscles. Repeat of the three exercises followed. Strength protocol performed four times over next two weeks, with the fourth time becoming the post-test. Static videos of participant's RSP taken throughout the pre and post-test. Videos taken during each exercise to assess dynamic posture in pre and post-test.

OUTCOME MEASURES

Dartfish Motion Analysis Software (Dartfish Inc., Fribourg, Switzerland) used to analyze immediate differences in RSP, as well as differences over the course of the pre-test to the post-test. Used independent samples t-test and a mixed-model ANOVA with a repeatedmeasures factor in SPSS.

RESULTS

No significant immediate change in static postures (p > .05). Comparisons of experimental and control groups, effect of intervention over time, and interaction effects were not significant (p < .05).

CONCLUSION

KT alone, or KT with a strengthening protocol for the rhomboids, may not be an effective solution for RSP. Furthering testing needs to occur with greater number of participants.

KEY WORDS: kinesio tape, rounded shoulders, strengthening

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