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Cody Cummins
Wright State University, linkfreak13@gmail.com

Brooke Kidd
Wright State University, kidd.33@wright.edu

Jasmin Harvey
Wright State University, harvey.jasmin@yahoo.com

Siobhan Fagan
Wright State University, siobhan.fagan@wright.edu

Scott L. Bruce
Wright State University, scott.bruce@wright.edu

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Effect of Kinesio Tape, Rock Tape, and a Sham Tape on Upper Extremity Reaction Time

Cody Cummins, AT, ATC, Brooke Kidd, AT, ATC, Jasmin Harvey, ATC, Siobhan Fagan, MEd, AT, ATC, CSCS, Scott L. Bruce, EdD, AT, ATC

Department of Kinesiology & Health, Wright State University

CONTEXT

In the literature of Athletic Training, there are no current studies that have been published involving a comparison of therapeutic tapes on the shoulder and its effect on reaction time using the Dynavision D2™. There can be clinical relevance to athletes in overhead sports such as baseball, softball, and volleyball.

OBJECTIVE

The purpose of this study is to determine whether therapeutic tape has an effect on Dynavision reaction time (RT).

DESIGN

Randomized Control Study.

SETTING

Midwestern NCAA, "mid-major" Division I institution.

PATIENTS

56 healthy, physically active, college-aged individuals were subjects in this study. Subjects (23 males and 33 females with overall mean age of 21.25 [± 2.80]) who had not suffered a shoulder injury within the past six months or were an "overhead sport" student-athletes were excluded from participation.

INTERVENTIONS

Baseline data using the Dynavision D2 were gathered for all subjects. The "slowest" shoulder was then taped with one of

randomly selected tapes (Kinesio Tape, RockTape, and a Sham Tape). Dynavision testing was repeated and comparisons between baseline and taped condition were made.

MAIN OUTCOME MEASURE

A χ^2 test and paired t-test were used to analyze the data in the study.

RESULTS

The χ^2 testing found no statistical differences across the three tape groups ($\chi^2 = 0.426$, $p = 0.808$). For 5 of the 6 conditions, RockTape taped subjects had faster reaction times. Statistical significance from paired t-tests was achieved for only 3 of the 6 conditions.

CONCLUSION

RockTape appears to aid in upper extremity reaction time as tested on the Dynavision. There were no differences between Kinesio Tape and Sham Tape conditions. The presence or absence of statistical significance does not always equate to clinical significance.

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KEY WORDS: *evidence base research, Kinesio Tape, Rock Tape, Sham tape, Dynavision, reaction time.*