The Effect of Kinesiotape on Shoulder Pain

1. The possible sources of volunteers for this study will be about 40 volunteers: 20 healthy subjects and 20 subjects with shoulder pain. The volunteers will be recruited at the central Texas area. The inclusion criterion is: subjects must be between the ages 18 to 30. The inclusion criterion for a shoulder injury includes: subjects states a pain inside the shoulder joint during activities at least for 2 weeks, one of special tests is positive for pain to confirm a shoulder injury. Subject will be excluded from the study if subjects have surgery within two years. This research is targeting both healthy individuals and individuals with shoulder injury to compare the affect of Kinesiotape® (a thin elastic tape) in both populations. To determine past injuries, a medical history form will be filled out along with the informed consent form.
2. Subject recruitment will take place at the central Texas area. Recruitment will be open to undergraduate and graduate students in the Texas State University. The investigator will also contact an owner of local physical therapy clinics that they are interested in recruiting subjects for this study. The investigator explains them the purpose of this study and the procedures. The investigator will go over the reason for conducting this study and procedures, and answer any question regarding of this study. Each subject will read over consent form and sign in agreement to participate in the study. A copy of the consent form will be given for the future if needed.
3. The procedure for this study will be as follows: Three 3-D accelerometer sensors will be attached subject’s behind the neck, elbow, and the wrist in the dominant arm to measure shoulder angle. The subject stands up straight, and their dominant shoulder will be covered by curtain which has a hole to put through their arm to minimize visual stimulus. Their ear will be covered by earphone to minimize the auditory stimulus. First, the subject arm is passively raised 120 degree by the investigator. After the arm is returned the side of the body, the subject will be told to reproduce the 120 angle. Secondly, subject arm is raised 90 degrees from the body; elbow is bended 90 degrees (neutral position) passively by the investigator. The investigator will rotate subject’s shoulder in 30 degree inward, 30 degree outward, and 75 degree outward. Then, the subject will be told to recreate there three angles again by themselves. The investigator will apply two pieces of Kinesiotape® on the subjects’ shoulder, and the subject will perform reproduction of four angles. The subjects will rate shoulder pain during shoulder movement scale 1 through 10 in all the angles. Investigator will record the angle of active movement, and compare angle errors of Kinesiotape ®application. All the data will be analyzed by Microsoft Excel® software.
4. The subjects may feel discomfort during tape removal. Mild skin irritation may be experienced after tape removal on the sensitive skin.
5. To minimize discomfort from tape removal, the investigator should remove the tape with slow and control movement. If a subject experience skin irritation after removal, OTC hydrocortisone cream may be applied on the tape application site to decrease itchiness, if they are not allergic to the medication.
6. The potential benefits gained by the subjects are; find out their joint sense, to learn Kinesiotape would help to increase their joint sense and decrease their pain in the shoulder. The result of this proposed study may benefit therapists such as athletic trainer and physical therapist by providing information about effect of Kinesiotape® on shoulder pain.
7. There will be no compensation offered or provided to the participants for this study.
8. It is very clear that there are more benefits than potential risk to the subjects. Precaution will be taken to decrease potential risks such as discomfort after tape removal and skin irritation at tape application site.
9. The testing site is the Athletic Training Lab in the Jowers Building at Texas State University. There are no current agencies for this study.
10. Athletic training involves recognition, treatment and rehabilitation of athletic injuries. This study relates to my program, athletic training, by investigating effect of Kinesiotape® on the individual with shoulder pain. The result of this study will hopefully provide information to subjects, community, and fellow clinician regarding Kinesiotape® and its effect on individual with shoulder pain. My supervising faculty is Dr. Jack Ransone, Graduate Athletic Training Coordinator at Texas State University.
11. This proposed study has not been reviewed by another IRB.
12. Future researchers and the committee will have access to the results of study.