

The Short Time Effect of Kinesio Taping on Back Muscle Endurance, Lower Back Flexibility and Balance in Sedentary Young Adult

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ABSTRACT

Background: A sedentary lifestyle was often experience problems with the musculoskeletal system. Less physical activity will reduce the capability of the muscles. Moreover, it can cause pain or diseases related to the musculoskeletal system. Therefore, this study aimed to examine the effect of Kinesio taping on back muscle endurance, lower back flexibility and balance in sedentary young adults.

Method: This study was a randomized controlled trial, 44 sedentary young adults were selected and subjects were randomly assigned into two groups, the KT group and the control group. Each group included 22 subjects, they were assessed before the taping intervention of Schober's test, Single stance test, Y-balance test and Biering-Sorensen test. After the taping intervention 30 minute, subjects were recorded using the same test method.

Result: There was a statistically significant increase of single leg stance in the KT group compared to the control group ($p \leq 0.05$). In other tests, the KT group was significantly increased compared to before and after the experiment. On the other hand, the flexibility of the back had a statistically significant decrease in the KT group. Besides, there was no significant difference of the flexibility of back between in the KT group and the control group.

Conclusion: In this study found that the kinesio tape can increase capability of balance in people with sedentary behavior with statistical significance. Due to kinesio tape can increase the sensory response in the area where the tape is attached. This result shows Kinesio taping seems to have an effect on perception and the ability of the nervous system and muscles to control movement.

Keywords: *Kinesio tape; endurance; Balance; Sedentary lifestyle*