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Immediate effect of gluteus medius kinesiotaping on plantar pressure distribution and balance among healthy individuals

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Immediate effect of gluteus medius kinesiotaping on plantar pressure distribution and balance among healthy individuals

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ABSTRACT

Study design: A Randomized Cross-Over Trial

Background: Hip abductor muscles help to give stability and lower limb control which function as connector with the pelvis. Kinesiotaping is one of the methods which have the similar qualities like the skin of human body and help in the dynamic and static support. This also had proven as application of ankle taping provides alteration in the plantar pressure and muscle activation of thigh muscles. Therefore, there is a dearth in literature on immediate effect of gluteus medius kinesiotaping on plantar pressure and balance among healthy individuals. Outcome measures were taken by blinded assessor at the baseline, after

kinesiotaping and sham taping.

Methods: Six healthy individuals were assigned to three methods of taping and each individual had undergone to the following methods of tape- (Kinesiotaping (KT), Sham taping (ST) and No taping (NT)), and application has occurred in randomized order. Plantar pressures were recorded through platform system. Balance and functional performance were recorded by biodex balance system and deep squat score. Statistical analysis has been given in the terms of mean and standard deviation.

Results: There is a slight significant mean difference in the balance of dynamic analysis between experimental group and no tape group. Particularly in medio-lateral stability index and overall sway index. But there was no significant change in between other group like no tape and sham tape, also kinesiotape and sham tape. There was no significant change in the plantar pressure and deep squat score due to a smaller number of participants

Conclusion: Gluteus medius KT is proved to have slight immediate effect on dynamic balance but as there is no specific effect on plantar pressure and deep squat score. Here, as we cannot conclude significant effect due to smaller number of sample size.

Keywords: hip abductor, gluteus medius, kinesiotape