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## Does kinesio taping correct exaggerated dynamic knee valgus? A randomized double blinded sham-controlled trial

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**Background:** Deficiency in hip girdle neuromuscular control can cause exaggerated dynamic knee valgus (DKV) which afflicts the knee joint and lead to knee injuries especially ACL injury in sports. Though kinesio taping (KT) is known to improve function, stability and proprioception, scanty evidence is available on its effectiveness in athletes. We hypothesized that kinesio taping could enhance neuromuscular control of the hip girdle there by causing a reduction in DKV.

**Aim/Objective:** To determine whether kinesio taping on gluteus medius can correct exaggerated dynamic knee valgus and improves hip abductor strength.

**Method:** Forty collegiate athletes, aged between 18 and 28 years, of both genders with presence of dynamic knee valgus ( $>8$  degrees for men and  $>13$  degrees for women) were recruited in the study. Athletes were excluded if they had history of lower back pain, history of any injury or surgery to the lower extremities during the past year. Subjects who met the inclusion criteria were randomized into kinesio taping (KT) group and sham taping (ST) group. Donatelli drop leg test (DDT) and DKV test were performed before, immediately and on the third day after the application of KT on them and documented.

**Results:** There is a significant reduction in DKV among male [3.1 degrees (4.1-2.0);  $p<0.001$ ] and female [5.5 degrees (7-4);  $p=0.002$ ] immediately after application of taping but not on the third day after application of KT. There is a significant rise in DDT immediately and on the third day after application of KT between KT group and SC group.

**Conclusion:** There is a reduction in DKV immediately after the application of KT. However, there was no significant difference between KT group and SC group on the third day. Meanwhile, gluteus medius strength also showed significant improvement immediately after taping and it was maintained even on the third day.

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