

## CHANGES OF DIFFERENT SECTIONS AND TENSIONS OF KINESIOTAPE OVER THE SKIN WITHDRAW

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### ABSTRACT

**Background and Purpose:** Kinesiotape (KT) was commonly used in sport and rehabilitation fields. It was applied on the skin, but the affected ductility of skin using KT was unknown. Our purpose was to identify whether the skin withdraw was varied under different section and tension of KT.

**Materials/Methods:** 10 healthy adults participated ( $BMI = 22.3 \pm 2.6 \text{ kg/m}^2$ ) in this study. The KT was applied on the medial side of right forearm. The skin was marked every 1cm from the olecranon process toward the wrist for 20 cm. Subjects were randomly assigned to different tensions (40%, 20%, and 0% ) which apply on 10 cm section of the KT. The first and last 5 cm sections were applied with no tension. A vernier caliper was used to measure the distance between each marks which were originally 1 cm on the skin. Repeated ANOVA with two within-subject factors was used to exam the difference of skin withdraw among 3 different tensions.

**Results:** Skin withdraws under 40% tension was excluded because of different tendencies. The skin withdraw was more under 20% than that of 0% tension ( $p < 0.05$ ). And the skin withdraw was less in the last section than that in the others under the main effect of sections ( $p < 0.05$ ).

**Conclusions and Clinical Relevance:** Skin deformation was more under higher tension and lesser close to the last anchored site. Under 40% tension of KT, the skin withdraw showed different tendency may because of changed elastic property.