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DIRECTION OF SKIN DEVIATION UNDER DIFFERENT SECTIONS AND TENSIONS OF KINESIOTAPE

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ABSTRACT

Background and Purpose: Our purpose was to identify the direction of kinesiotape (KT) withdraw after attached on the skin.

Materials/Methods: Eight healthy adults participated (BMI = 22.0 ± 2.9 kg/m²) in this study. The KT was applied on the medial side of right forearm. The skin was labeled every 5 cm from the olecranon process toward the wrist for 15 cm. A ruler was fixed on the table as external reference. 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 deviation of the skin related to the ruler over the labels of 5, 10, and 15 cm. The label deviated toward the wrist was considered as positive value. Repeated ANOVA with two within-subject factors was used. Paired *t* test was used for multiple comparison test. After Bonferroni's adjustment, α was 0.05.

Results: Significant interaction was found ($p=0.016$). No significant difference was found in multiple comparison test ($p=0.024\sim 0.967$). All of the labels of 5 cm were deviated toward the wrist, except under 0% tension. The deviations of other labels were mixed with both directions under three different tensions.

Conclusions and Clinical Relevance: Skin deviation was unequal between each section of the KT. The skin near to the first anchored site was pulled forward by tension while other sections may withdraw.