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Acute and 48 h effect of kinesiotaping on the handgrip strength among university students

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Abstract

This study aimed to determine the acute and 48 h effect of kinesiotaping (KT) on the maximal grip strength of wrist flexor muscle, and the comfort level immediately and after 48 h with the KT applied on the forearm. A sample of 31 university students (eight females and 23 males) (mean age 23.71 ± 2.78 years; mean body mass 72.05 ± 13.54 kg; mean body height 173.81 ± 8.91 cm; mean body mass index 23.69 ± 3.24 kg/m²) participated in the present study. The left or right forearm of the participants was taped randomly. Only one of the

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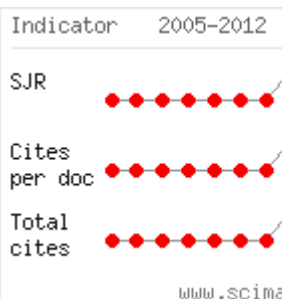
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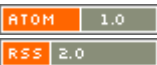
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forearms of each participant was taped (EH) while the other acted as a control (CH). Handgrip strength and the comfort of wearing the KT were tested: (1) without taping; (2) 15 min after taping; (3) 48 h after taping with the KT remaining in situ and (4) 15 min after removing the tape. The results of the ANOVA showed no interaction effects between the group variable (EH, CH) and time (1, 2, 3, 4) [$F(3, 156) = 1.140$; $p = 0.332$; $\eta^2p = 0.021$; $P = 0.282$] in the handgrip strength. No changes were found in maximal grip strength immediately and 48 h after KT application. The level of comfort after 48 h wearing the KT on the forearm was very high.

Key words: KINESIO TAPE; GRIP STRENGTH; Y
TECHNIQUE; FOREARM MUSCLE

doi: 10.4100/jhse.2012.74.02

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