

A Comparison of Materials in Knee Sleeves for Osteoarthritis: Affects and Function

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ABSTRACT

Limited research has been done on specific materials in knee sleeves and the impact on the knee sleeve effectiveness. **PURPOSE:** The purpose of this study is to investigate the different types of materials in knee sleeves used for managing knee osteoarthritis symptoms. Neoprene, nylon-spandex, and copper infused knee sleeves used to determine which material is the most effective in managing osteoarthritis symptoms. **METHODS:** Four males and four females (age= 37.6±11.6 yrs, ht=167.9±10.9 cm, wt=69.1±33.4 kg, %BF= 33.7±12.1kg) participated in four randomly assigned trials: Trial 1 was completed without wearing any knee sleeves and trials 2-4 were completed wearing a knee sleeve. Repeated measures ANOVAs were used to examine the effect of knee swelling, pain, range of motion (ROM), balance, walk time, step counts, and average torque power. Alpha was set at .05 for all tests. **RESULTS:** No significant differences were found in knee swelling, pain, range of motion (ROM), balance, walk time, step counts, and average torque power between the four conditions (no sleeve, neoprene, spandex, and copper compression © sleeves), $p>.05$. **CONCLUSIONS:** These findings suggest that knee sleeves do not influence knee swelling, pain, range of motion (ROM), balance, walk time, step counts, and average torque power in knee osteoarthritis.

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