

The Effects of Dynamic Training Shoes Exercises on Isokinetic Strength Performance

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Abstract : The aim of this study was to determination of the effects of knee and hip isokinetic performance during the training with the special designed roller-shoes. 30 soccer players participated as subjects and these subjects were divided into 3 groups randomly. Training groups were; with the dynamic training shoes group, without the dynamic training shoes group and control group. Subjects were trained speed strength trainings during 8 weeks (3 days a week and 1 hour a day). 6 exercises were focused on the knee flexors and extensors, also hip adductor and abductor muscles were chosen and performed in 3x30secs at each sets. Control group was not participated to the training program. Before and after the training programs knee flexor and extensor muscles and hip abductor and adductor muscles' peak torques were measured by Biodex III isokinetic dynamometer. Isokinetic strength data were analyzed by using SPSS program. A repeated measures analysis of variance (ANOVA) was used to determine differences among the peak torque values for three groups. The results indicated that soccer players' peak torque values that the group of using the dynamic training shoes, were found higher. Also, hip adductor and abductor peak torques that the group of using the dynamic training shoes, were obtained better than the other groups. In conclusion, the ground friction forces are an important role of increasing strength. With these shoes, using rollers, soccer players were able to move easily because of the friction forces were reduced and created more range of motion. So, exercises were performed faster than before and strength movements in all angles, it ensured that the active state. This was resulted in a better use of force.

Keywords : isokinetic, soccer, dynamic training shoes, training

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