

Effect of Fatigue on the Proprioception Acuity of Quadriceps Muscle after Inducing Fatigue and Followed By Local Cooling in the Same Muscle

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Abstract

Aim: To study the effect of fatigue on the proprioception acuity of quadriceps muscle after inducing fatigue and followed by local cooling. **Method:** The study was conducted on 30 males (age 22.53 ± 2.12 years, BMI 22.27 ± 1.52). Pre test and post test responses regarding the weight discrimination task were recorded both before and after inducing fatigue with local cooling. **Results:** Mean values of correct responses for weight discrimination task (60gm, 120gm, 180gm and 240gm) for pre test were 0.83 ± 0.379 , 0.73 ± 0.45 , 0.7 ± 0.46 , 0.83 ± 0.379 , after fatigue were 0.5 ± 0.509 , 0.5 ± 0.509 , 0.5 ± 0.509 , 0.4 ± 0.498 and fatigue with cooling were 0.23 ± 0.43 , 0.3 ± 0.46 , 0.3 ± 0.46 , 0.13 ± 0.346 respectively. **Conclusion:** It concluded that the proprioceptive acuity is reduced after fatigue and cooling further reduces the acuity of a fatigued muscle.

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