

Six Weeks of Core Stability Training Improves Physical Performances Among Army Male Rugby Players: A Randomized Controlled Pilot Study

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Core Stability Training (CST) is used extensively in injury prevention and rehabilitation, but more recently it is also used to enhance sports performance despite limited evidence that CST program alone leads to improve athletic performance. However, the effect of core stability training on speed, agility, upper and lower body power in rugby players had not been evaluated before. Therefore, the objective of this study was to evaluate physical performances following a CST intervention in army male rugby players. After obtaining their written consent, eight male rugby players (mean \pm SD age, Height, and body mass of 25.25 ± 2.4 years, 164 ± 3.0 cm, and 69.6 ± 14.9 kg, respectively) participated in the training program. It consisted of static and dynamic CST sessions complementary to the usual physical training, three times per week for six weeks as the intervention group and eight rugby players (mean \pm SD age, Height, and body mass of 29.75 ± 4.0 years, 166.0 ± 4.0 cm, and 72.3 ± 19.1 kg, respectively) as the control group which followed the usual physical training. Agility, speed and upper limb power were not significantly different between week 0 and week 6 in the intervention group ($p = 0.16$, $p = 0.77$, and $p = 0.40$, respectively). But, the lower limb power was significantly different ($p = 0.04$) in the intervention group. The control group did not show any significant difference. This study provides evidence that CST improves lower limb muscle power without improving agility, speed and upper body muscle power in rugby players.

Keywords: Core stability, Physical performance, Rugby players