



## **A prospective study of core musculature endurance and the risk of lower extremity injuries among male football players**

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**Abstract:**Core muscles endurance are important issues in lower extremity injury among football players. This study investigates the relation between core muscles' endurance and the occurrence of different lower extremity injuries during one season. Eighty-two male football players (mean age  $20.69 \pm 3.85$ , weight  $76.3 \pm 14$  and height  $178 \pm 9.6$ ) were tested. After being screened for a season. The prone-bridge, side-bridge, trunk flexion and horizontal back extension hold times were recorded for endurance assessment; in addition the numbers of different lower extremity injuries during the current season. The negative binomial regression method revealed that the maximum holding time for trunk flexor endurance only was significantly related to occurrence of lower extremity injuries ( $p < 0.05$ ). On the other hand the maximum holding time for plank, side plank and trunk extensor endurance were not significantly related to frequency of lower extremity injuries ( $p \geq 0.05$ ). Abdominal muscle endurance is related to the risk of lower extremity injuries more than plank, side plank and trunk extensor muscles endurance. Abdominal muscles endurance are more important issues in preventing different lower extremity injuries among male football players.

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