Original Paper

Knee joint muscles activity during single leg drop landing from different heights among men with genu varum and men with normal knee

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Abstract

Background and Objective: Genuvarum is considered as one of the risk factors for the incidence of osteoarthritis. This study was done to compare the knee joint muscles activity during single leg drop landing from different heights among men with genu varum and men with normal knee.

Methods: This case – control study was done on 20 male students with genu varum deformity and 20 male students with normal knee. Genu varum deformity was measured by a kolis and goniometer. Muscle activity of lower limb was recorded with electromyography.

Results: There was significant difference in muscles activity of medialis gastrucnemius, peroneus longus, biceps femoris and gluteus medius in cases and controls ($P<0.05$), while no significant difference was observed in other muscles.

Conclusion: The changes in the knee normal structure might affect daily activities and possibly lead to in injuries due to physical training.

Keywords: Muscles activity, Single leg drop landing, Genu varum

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