

Effects of Flexible Flat Feet on Electromyographic Activity of Erector Spinae and Multifidus

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Abstract : Background: Flexible flatfoot (FFF) has been considered as a risk factor for several lower limb injuries and mechanical low back pain. This was attributed to the dysfunction of the lumbopelvic-hip complex musculature. Objective: To investigate the influence of FFF on electromyographic activities of erector spinae and multifidus. Methods: A cross-section study was held between an FFF group (20 subjects) and a normal foot group (20 subjects). A surface electromyography was used to assess the electromyographic activity of erector spinae and multifidus. Group differences were assessed by the T-test. Results: There was a significant increase in EMG activities of erector spinae and multifidus in the FFF group compared with the normal group. Conclusion: There is an increase in EMG activities in erector spinae and multifidus in FFF subjects compared with normal subjects.

Keywords : electromyography, flatfoot, low back pain, paraspinal muscles

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