

Evaluation of Postural Stability in Female Patients with Structural Scoliosis

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Abstract : Background: structural scoliosis is a twisting deformity in the curve of vertebral column to the lateral side with simultaneous rotation of the vertebrae, which occurs during the growing years from 10 years to the puberty. Purpose: Studies investigating balance problems specific to scoliotic patients showed that those patients reveal variable balance abnormalities. In this study we evaluated the difference in postural stability responses between female patients (students, office worker and shish weapon players) with structural scoliosis and normal subjects. Methods: sixty subjects participated in this study. Thirty female patients with structural scoliosis with a mean age of (19.5 ± 3.26) years, with Cobb's angle ranged from 20° to 40° in the major curves, and thirty healthy female subjects with a mean age of (19.36 ± 2.41) years. Postural stability of both groups were evaluated by the Biodex Stability System. Results: There was no significant difference between both groups in dynamic balance test. Interpretation/Conclusion: As there was no significant difference between both groups in balance response, it is not recommended to add balance training as an extra physical therapy program for AIS female patients.

Keywords : structural scoliosis, postural stability, female patients, evaluation

Conference Title : ICBSE 2015 : International Conference on Biomechanics and Sports Engineering

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : February 12-13, 2015