

Investigating Changes in Hip and Knee Joints Position in Girls with Patellofemoral Syndrome

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Abstract : Background and Aim: Increased fatigue causes injuries; the purpose of this article was to investigate the angular displacement of the hip and knee joints in girls with patellofemoral syndrome. Materials and Methods: Thirty girls with an average age (age 28.73 ± 1.83 , height 168.49 ± 5.59 , weight 63.73 ± 12.73) participated in this study in two groups of 15, experimental and control. The jet evaluation test was taken from the subjects' knee and thigh angle, and then these tests were repeated with the application of different inclines of the treadmill; the tests were examined in a neutral position and in a positive and negative slope of 5 degrees. The mean and standard deviation were used to describe the data, and the Shapirovik test was used for the normalization of the data to compare and examine the variables in the two research groups using an independent t-test and repeated analysis of variance at a significance level of 0.05. Conclusion: In general, according to the current studies of people with patellofemoral syndrome, running on steep inclines, as well as running on a treadmill and making the incline angle of the treadmill within the limit of minus 5% to plus 5%, does not affect the improvement of this condition, and it is not recommended. And according to the research, girls with patellofemoral syndrome should be placed on the treadmill at an inclined angle to run.

Keywords : patellofemoral syndrome, angular displacement of the knee, angular displacement of the thigh

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