Abstract

The purpose of this study was to find out the effects of Progressive Agility Trunk Stabilization (PATS) Exercises and Manual Intervention Therapy on Rehabilitation of Acute Hamstring strain in Male athletes. For this purpose, forty five (N=45) male hamstring strain injured athletes in the state of Tamilnadu, India, were selected as subjects during the year 2016-2017. The subjects were divided at random into three groups of fifteen each (n=15). Group-I underwent Progressive Agility Trunk Stabilization (PATS) Exercises, Group-II underwent Manual Intervention Therapy and Group-III acted as Control. The Rehabilitation Programme period was limited to three days per week for twelve weeks. The dependent variables selected for this study were as follows: Sports Injury variables such as Hamstring Strain, Physical Fitness variables such as Speed, Strength, Agility, Flexibility, Endurance and Leg Explosive Power. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables. The data obtained from the experimental groups before and after the experimental period were statistically analyzed with dependent ‘t’-test and Analysis of covariance (ANCOVA). Whenever the ‘F’ ratio for adjusted post test means was found to be significant, the Scheffe’s Post hoc test was applied to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases.

The Experimental groups, namely Progressive Agility Trunk Stabilization (PATS) Exercises group and Manual Intervention Therapy group have shown significant decrease in selected sports injuries related variable, namely Hamstring Strain and significant improvement in selected physical fitness related variable, namely Speed, Strength, Agility, Flexibility, Endurance and Leg Explosive Power.

The Manual Intervention Therapy group has been found to be better than the Progressive Agility Trunk Stabilization (PATS) Exercises group and Control group in decreasing Hamstring strain and increasing Speed, Strength, Agility, Flexibility, Endurance and Leg Explosive Power.