

A Comparative Study on the Effectiveness of Conventional Physiotherapy Program, Mobilization and Taping with Proprioceptive Training for Patellofemoral Pain Syndrome

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Abstract : Introduction and Purpose: Patellofemoral Pain Syndrome [PFPS] is characterized by pain or discomfort seemingly originating from the contact of posterior surface of Patella with Femur. Given the multifactorial causes and high prevalence there is a need of proper management technique. Also a more comprehensive and best possible Physiotherapy treatment approach has to be devised to enhance the performance of the individual with PFPS. Purpose of the study was to: - Prevalence of PFPS in various sports - To determine if there exists any relationship between the Body Mass Index[BMI] and Pain Intensity in the person playing a sport. - To evaluate the effect of conventional Physiotherapy program, Mobilization and Taping with Proprioceptive training on PFPS. Hypothesis 1. Prevalence is not the same with different sporting activities 2. There is a relationship between BMI and Pain intensity. 3. There is no significant difference in the improvement with the different treatment approaches. Methodology: A sample of 200 sports men were tested for the prevalence of PFPS and their anthropometric measurements were obtained to check for the correlation between BMI vs Pain intensity. Out of which 80 diagnosed cases of PFPS were allotted into three treatment groups and evaluated for Pain at rest and at activity and KUJALA scale. Group I were treated with conventional Physiotherapy that included TENS application and Exercises, Group II were treated with compression mobilization along with exercises, Group III were treated with Taping and Proprioceptive exercises. The variables Pain on rest, activity and KUJALA score were measured initially, at 1 week and at the end of 2 weeks after respective treatment. Data Analysis - Prevalence percentage of PFPS in each sport - Pearsons Correlation coefficient to find the relationship between BMI and Pain during activity. - Repeated measures analysis of variance [ANOVA] to find out the significance during Pre, Mid and Post-test difference among - Newman Kuel Post hoc Test - ANCOVA for the difference amongst group I, II and III. Results and conclusion It was concluded that PFPS was more prevalent in volley ball players [80%] followed by football and basketball [66%] players, then in hand ball and cricket players [46.6%] and 40% in tennis players. There was no relationship between BMI of the individual and Pain intensity. All the three treatment approaches were effective whereas mobilization and taping were more effective than Conventional Physiotherapy program.

Keywords : PFPS, KUJALA score, mobilization, proprioceptive training

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