

EFFECTIVENESS OF SHORT FOOT EXERCISES ALONG WITH KINESIOTAPING ON MEDIAL LONGITUDINAL ANGULATION IN ACQUIRED FLAT FOOT SUBJECTS

Jibina Benny BennyVarghese¹, Mahima Manivannan², Sivakumar Chinnusamy³ & Pradeepa Mani⁴

¹BPT student, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

²MPT Student, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

³Principal, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

⁴Vice Principal, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

ABSTRACT

Background of the Study

Flat foot is a deformity that is becoming common nowadays. *Pes planus* also known as flat foot is the loss of the medial longitudinal arch of the foot, abduction of the fore foot, internal rotation and plantar flexion of the talus and calcaneal eversion. The prevalence of flexible flatfoot among Indian adults is 13.6%. For males it is 12.8% and females it is 14.4%. Thus, flatfoot is a common deformity in adults. The symptoms of flat foot are abnormal appearance of foot, pain beneath the medial malleolus, stiffness and restriction of ROM in hind foot. Flat foot is caused due to lower extremity injuries, increased intensity of low back pain, Talipes equinovarus deformity, ligamentous laxity, foot equinus deformity, tibial torsional deformity. Short foot exercise strengthens the intrinsic muscles and reduces the acquired flat foot. The application of kinesio taping has been suggested to improve the muscle contraction by supporting weakened muscle, decreasing inflammation and pain by increasing lymphatic flow and blood flow, and increasing the range of motion of the joint by adjusting the misalignment of muscle fibres, myofascia and joints. The purpose of the study is to find out the effectiveness of short foot exercises with kinesio taping to reduce acquired flat foot in adults.

Methodology

This study design is a simple experimental study, 15 subjects with acquired flat-foot were selected for this study. It is a Convenient sampling and sample size; subjects with the age range between 18-25 years were enrolled for this study. Participants were given short foot exercises with kinesio taping. The group will receive intervention for 6 days in a week for a period of 7 weeks. Total study duration was 4 months. This study was conducted at outpatient department of PPG College of physiotherapy. Prior the exercise program, angle of the foot was measured using Clark's method.

Result

The mean and standard deviation of short foot exercise pre-test values are 11.06 and 3.83 and post-test values are 30.93 and 2.73 respectively. The calculated *t* value and table value were 3.75 and 2.145. The obtained *t* value is greater than table value at 0.05 level of significance for 14 degrees of freedom.

Conclusion

This study concluded that the short foot exercise along with kinesio taping seemed to be beneficial for improving acquired flat foot.

KEYWORDS: *Pes Planus, Flat Foot, Clark's Method, Short Foot Exercise, Kinesio Taping*

Article History

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