

## **EFFICACY OF KINESIO TAPING ALONG WITH DROP SQUAT EXERCISES VERSUS KINESIO TAPING ALONG WITH LEG EXTENSION EXERCISES ON PAIN AND MUSCLE STRENGTH AMONG VOLLEYBALL PLAYERS WITH JUMPER'S KNEE**

*Fathima Lifafa Aboobacker<sup>1</sup>, Ilakiya Subramani<sup>2</sup>, Sivakumar Chinnusamy<sup>3</sup> & Pradeepa Mani<sup>4</sup>*

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

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

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

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

### **ABSTRACT**

#### **Background**

*Jumper's knee is clinically diagnosed condition of activity related to the anterior knee pain associated with tenderness at the inferior pole of the patella where the patellar tendon attaches.*

#### **Objective**

*The study's primary objective was to find out the Efficacy of Kinesio taping along with Drop squat exercises and Kinesio taping along with Leg extension exercises on pain and muscle strength among volleyball players.*

#### **Subjects and Methods**

*A pre-test and post-test experimental study design was used. A criterion based random sampling method was used to recruit players (N=20) diagnosed with Jumper's knee, and they were randomized into two treatment groups. The experimental Group-A received Kinesio taping along with Drop squat exercises whereas those assigned to experimental Group-B received Kinesio taping along with Leg extension exercises for a period of 12 weeks with one session for 5 days in a week. The efficacy of the treatment was measured through the Numerical pain rating scale (NPRS) and Handheld dynamometer (HHD). Both paired and unpaired 't' tests were employed to study the treatment effectiveness. A p-value <0.05 were considered 'significant'.*

#### **Result**

*The Group, which was exposed to the treatment of receiving Kinesio taping along with Dro squat exercises showed a better reduction in pain intensity (mean difference 2.2) and a notable improvement in the muscle strength (mean difference 53.5) than the other Group, that was exposed to the treatment by receiving Kinesio taping along with Leg extension exercises at 0.05 levels of significance.*

#### **Conclusion**

*There is a significant reduction in pain intensity, improvement in muscle strength and overall function of the leg following the application of Kinesio taping along with the Drop squat exercises for a period of 3 months in Jumper's knee players.*

### ***Clinical Implications***

*Application of Kinesio taping is found to produce a significant effect when combined with Drop squat exercises to manage Jumper's knee players.*

**KEYWORDS:** *Jumper's Knee, Kinesio Taping, NPRS Scale, Hand-Held Dynamometer, Drop Squat Exercises, Leg-Extension Exercises.*

---

### ***Article History***

**Received: 15 May 2024 | Revised: 31 May 2024 | Accepted: 18 Jun 2024**

---