## Effectiveness of Kinesiotaping and Shockwave Therapy in Managing Osgood's Schlatter Disease: A Literature Review

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## **ABSTRACT**

Osgood-Schlatter disease, characterised by apophysitis of the tibial tubercle, is a prevalent condition affecting physically active adolescents during periods of rapid growth, particularly boys aged 8 to 15 years. This condition is a leading cause of knee pain in this population. It often arises from repetitive sprinting and jumping activities. Physiotherapeutic interventions, including kinesiology taping for pain management, and emerging modalities such as Extracorporeal Shockwave Therapy (ESWT), have demonstrated promising outcomes in the management of this condition. This study aims to evaluate and summarize the existing evidence on the clinical effectiveness of kinesiotaping and shockwave therapy in managing Osgood-Schlatter disease.A comprehensive literature search spanning 2015 to 2024 across electronic databases, including PubMed, Google Scholar, Scopus, and the Cochrane Library, yielded 3,967 articles using the keywords "kinesiotaping," "extracorporeal shockwave therapy," and "Osgood-Schlatter disease" with Boolean operators AND and OR. After eliminating duplicates, only five articles were deemed eligible for further analysis. The reviewed literature primarily assessed pain using the Visual Analogue Scale with some studies also examining return-to-sports timelines. Three studies evaluated kinesiotaping as an adjunct to conservative treatments, such as quadriceps stretching and eccentric strengthening, demonstrating statistically significant improvements (p<0.05). Only two studies assessed ESWT, which demonstrated statistically significant changes in pain reduction after the treatment sessions. Preliminary evidence suggests that both kinesiotaping and ESWT may offer pain reduction when integrated into conservative exercise programmes for Osgood-Schlatter disease. However, to draw definitive conclusions, further high-quality randomised controlled trials are necessary. These trials should evaluate the efficacy of these interventions, both as standalone treatments and as adjuncts to conservative management, utilising reliable and standardised outcome measures.

**Keywords:** Extracorporeal Shockwave Therapy, Pain Management, Return to Sport, Taping.