

A randomized double-blind comparison of kinesio and athletic taping in the treatment of lateral epicondylitis: Clinical and sonographic outcomes

Sezen Savran¹, Ugur Toprak², Gul Baltaci³, and Nilgun Bek⁴

¹Ankara Şehir Hastanesi

²Eskisehir Osmangazi University

³Güven Sağlık Grubu

⁴Lokman Hekim University

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Abstract

Objective: To compare early effects of the application of kinesio and athletic taping as part of the intensive conservative physiotherapy of the lateral epicondylitis using the results from ultrasonography and clinical tests. **Methods:** Twenty-eight volunteers aged from 27 to 55 years old who had been clinically diagnosed with the lateral epicondylitis received in addition to the 4-week conventional physiotherapy program, one group was treated with athletic taping (n=14), the other with kinesio taping (n=14). The patients were evaluated through clinical tests (visual analog scoring, isokinetic elbow, grip and pinch strength tests, a Disability of Arm and Shoulder questionnaire (DASH) and ultrasonography examination on the first and last days of the physiotherapy program. **Results:** The two groups had similar characteristics in all the baseline findings-and they showed improvement in the DASH score and the regression in pain scores. The activity pain was further reduced in the kinesio group ($p = 0.006$). However, there were no significant differences in isokinetic muscle strength at 600 /s and 1200 /s velocity speeds between kinesio and athletic groups. There was also a substantial reduction in the tendon thickness in the kinesio group ($p = 0.063, 0.031, 0.07$; respectively) The tendon thickness was reduced by 92.3% in the kinesio-taped patients, and only 22.2% in the athletic taped patients. The presence of a tear in the tendon had a negative effect on the tendon thickness reduction ($p < 0.001$). **Conclusions:** The results showed that physiotherapy coupled with the kinesiotaping was considered to be the better choice in the short-term treatment of the lateral epicondylitis. Since the presence of a tear has an impact on the healing process, ultrasonography might be an efficient method to use to discover the existence of a tear in the tendon and informing the decision about the appropriate type of treatment.

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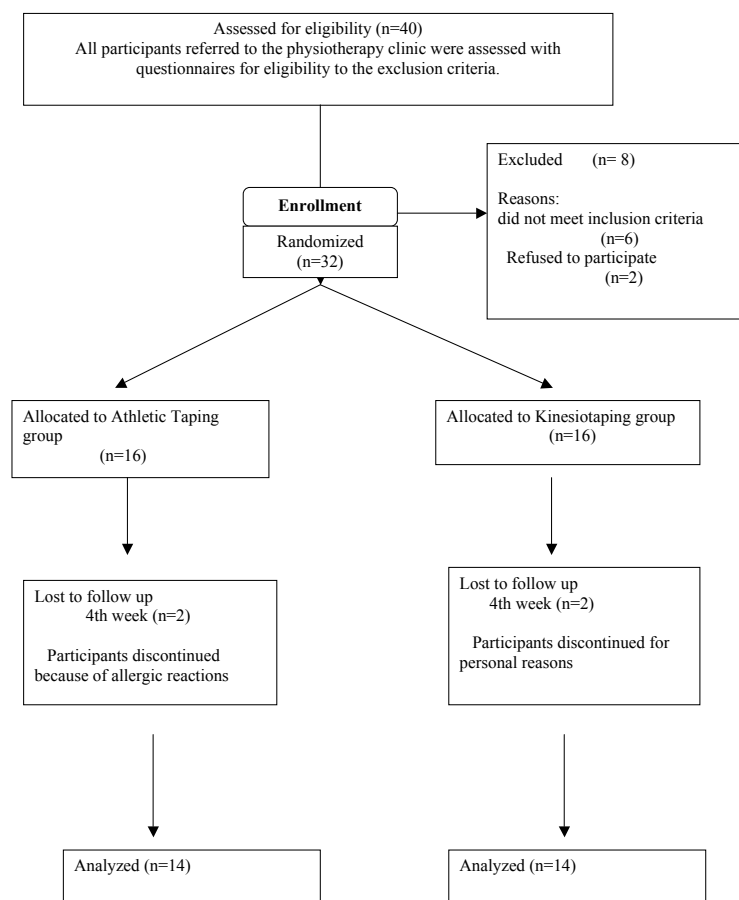


Figure 1. Flow chart of the subjects.



