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# Decreasing ankle swelling in athletes with lateral ankle sprain: Is there any difference between neuromuscular electrical stimulation and kinesio taping ${ }^{\circledR}$ ? 

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Ankle swelling (AS) is a chief complain in athletes with lateral ankle sprain (LAS) during the acute phase. Reducing this can help the athlete for a faster return to his/her training. The purpose of study was to compare the effectiveness of Kinesio Taping ${ }^{*}$ (KT) and neuromuscular electrical stimulation (NMES) on AS in such individuals. 31 athletes with unilateral ligamentous ankle sprain from various sports were allocated to either KT ( $\mathrm{N}=16$; mean age of 24.1 years) or NMES ( $\mathrm{N}=15$; mean age of 26.4 years) groups. During five consecutive days, KT was applied over the ankle medial and lateral surface in a fan cut pattern; however, NMES was performed for tibialis anterior and gastrocnemius muscles in 30 minutes. Outcome measurements to evaluate the extent of AS included volumetry, perimetry, relative volumetry, and difference in both ankles volumetry and perimetry at baseline, after receiving the interventions, and 15 days following the treatment completion. The results of ANOVA linear mixed model test showed no significant difference between the two groups in mean changes of the outcomes pre- and post-interventions ( $\mathrm{P}>0.05$ ). Furthermore, no significant difference in score changes of follow-up period was observed ( $\mathrm{P}>0.05$ ). None of both methods including KT and NMES have superiority to each other regarding to decreasing AS in athletes with LAS. Concomitant using of two methods and longer treatment duration are suggested to investigate their influences.

## Notes:

