

# **The influence of a single fasciotherapy treatment (Danis Bois®) on the muscle strength of young sportsmen with a subacute ankle sprain.**

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**BACKGROUND:** Muscular dysfunctions after an ankle sprain are very common, especially a dysfunction of the peroneal muscles, which have an important influence on the functional stability of the ankle joint. This phenomenon is an important factor in the recurrence of ankle sprains, often leading to chronic ankle instability. Unless the scientific evidence is actually not available, fasciotherapy is more and more used in clinical practice, such as in patients with an ankle sprain. Therefore this research focuses on the influence of a single fasciotherapy treatment (Danis Bois®) on the muscle strength in a population of young sportsmen with a history of a subacute ankle sprain.

**METHODS:** This randomized controlled trial included 30 young sportsmen with a subacute ankle sprain. Participants were randomly included in the intervention group or in the control group. The intervention consisted of one fasciotherapy treatment according to the method of Danis Bois®. The participants of the control group received a sham treatment. Before and after the treatments, the muscle strength was measured with a Biodex® System 4 dynamometer (Biodex Medical Systems Inc., Shirley, NY). A general linear model for repeated measures with time as within-subject factor and group as between-subject factor was used to detect significant differences ( $\alpha \leq 0.05$ ).

**RESULTS:** The eccentric eversion muscle strength at 30°/sec and at 120°/sec and the concentric eversion muscle force at 120°/sec increased significantly in the group who received a fasciotherapy treatment. All these participants also reported a subjective increase in suppleness.

**CONCLUSIONS:** A single treatment with fasciotherapy (Danis Bois®) has an immediate positive effect on the muscle strength and subjective suppleness of young sportsmen with an subacute ankle sprain.

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