

MEETING ABSTRACTS

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The effects of specific collagen peptides on sports-related activities in patients with chronic ankle instability

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Background

Chronic ankle instability (CAI) is quite common among competitive athletes, and there is still a need for better therapeutic approaches to prevent or treat the condition. In a previous investigation, specific collagen peptides (TENDOFORTE®) were shown to enhance the perceived function of the ankle as measured by the Cumberland Ankle Instability Tool (CAIT), and the Foot and Ankle Ability Measure (FAAM; German Version) [1].

The objective of this study was to perform a more detailed exploratory examination of the data from the study by Dressler et al. [1] to gain a greater understanding of the impact of TENDOFORTE® on CAI patients.

Materials and Methods

The statistical analysis consisted of data from 50 male and female athletes with CAI (26.9 ± 9.1 years). Over a period of 6 months, the participants received either 5 g TENDOFORTE® or 5 g placebo (maltodextrin). In addition, all the subjects were asked to follow a standardized ankle-loading protocol. FAAM-G and CAIT questionnaires were obtained at baseline (T_0) and 6 months (T_6).

Results

Overall, the CAIT and FAAM scores improved in the group receiving collagen peptides to a statistically significantly greater extent than in the placebo group ($p < 0.05$). When considering each item, the improvements were reported mainly for sporting activities by the FAAM subscale "Sports" (Figure). With the exception of "Performing with proper techniques" ($p = 0.060$), the improvements for all the items were statistically significantly greater in the treatment group than the placebo group ($p < 0.05$). Furthermore, CAIT scores in the treatment group improved in all items by 9 – 33 %. In contrast, only 7 of 9 CAIT items improved in the placebo group by 2 – 22 %.

Conclusion

These findings demonstrate that the daily intake of 5 g specific collagen peptides (TENDOFORTE®) was associated significantly with improvements in sports-related activities among patients suffering from chronic ankle instability.

Acknowledgement

The authors have neither financial nor competing interests concerning the outcome of this investigation.

Reference:

1. Dressler, P., Gehring, D., Zdzieblik, D., Oesser, S., Gollhofer, A., and König, D. Improvement of Functional Ankle Properties Following Supplementation with Specific Collagen Peptides in Athletes with Chronic Ankle Instability. *J. Sports Sci. Med.* 2018 **17**, 298–304.

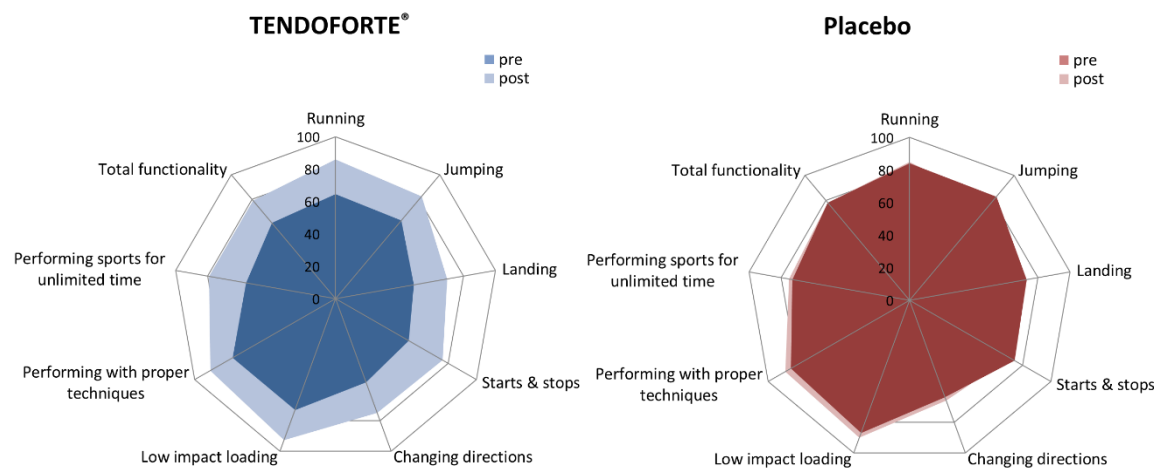


Fig. 1(abtract A30). Percentage changes in the FAAM subscale scores “Sports” (n = 50)