

USE OF THE FOOD SUPPLEMENT TENFLEX® IN PLANTAR FASCIITIS

OBSERVATIONAL STUDY

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INTRODUCTION:

Plantar fasciitis is the most common cause of plantar pain. It is estimated that one out of ten people experience thalalgia or plantar pain in their lifetime.

Non pharmacological treatments are used like- first line treatment and are often used in patients with musculoskeletal disorders of the foot and ankle. **Tenflex®** is a food supplement that stimulates fibroblasts for collagen and proteoglycan production, as well as stops the inflammatory cascade. It is indicated for supplementation in patients who need to improve the quality of the connective tissue of tendons, ligaments, fasciae and aponeurosis.

MATERIAL AND METHODS:

Prospective observational study in 15 patients diagnosed with plantar fasciopathy. General variables were recorded at baseline; gender, age and BMI. All patients included were treated with **Tenflex®** 1 sachet per day, and other treatments could be additionally indicated. The effectiveness of the **Tenflex®** food supplement was evaluated through the Foot Function Index (FFI-Sp) and the Visual Analog Scale (VAS) of pain. The FFI-Sp assesses foot pain, disability and activity limitation. Baseline and first (3 months) and second visit (6 months) data were recorded. A comparison of means was performed using Friedman's non-parametric method and when statistically significant differences were obtained, Wilcoxon's T-test comparisons were performed using 3 contrasts (visit 0-1, visit 1-2 and visit 0-2) with an alpha of 0.0167 (one third of 0.05).

RESULTS:

Of the 15 patients included in the study, 60% were male.

The mean age was 62.13 years (ds 11.1 years) and the BMI was 24.85 (ds 3.47). The 86.66% had been treated with other previous treatments (corticosteroid infiltration, plantar orthoses or rehabilitation).

The mean adherence to treatment with **Tenflex®** was 92.3%. Additionally, 7 of the patients were prescribed shock waves, 4 patients with plantar supports, 1 patient with rehabilitation and the rest only **Tenflex®**.

At the beginning of the study, the patients presented a mean pain of 6.20 (ds 2.21) on the VAS scale, with a final score of 1.2 (ds 0,86). Statistically significant differences were observed (Friedman, $p < 0.001$) and an improvement in pain was obtained between each visit (Wilcoxon, $p < 0.001$). between visits (Wilcoxon, $p < 0.001$) (Figure 1).

The FFI-Sp rating at baseline was 48.09% (ds 20.87%), with the mean of the subindices for pain being 58.15% (ds 20.78%), for disability 53.26% (ds 19.89%) and for activity limitation 20.67% (ds 27.5%). At the end of the study, FFI-Sp decreased to 6.14% (ds 4.64%), showing an improvement at six months in all three subscales; pain (26.45%; ds 12.99%), disability (6%; ds 4.82%) and activity limitation (1.07%; ds 3.1%) (Figure 2).

Both in the overall assessment of FFI-Sp and for the subscales, an improvement in the evolution was found, with statistically significant differences (Friedman $p < 0.001$) between each visit, despite the small sample size. Improvement was observed in all indicators (Willcoxon, $p < 0.001$) except for the pain sub-index between the first and second visit (Willcoxon, $p = 0.242$) motivated by a marked decrease in pain between the baseline visit and the first visit.

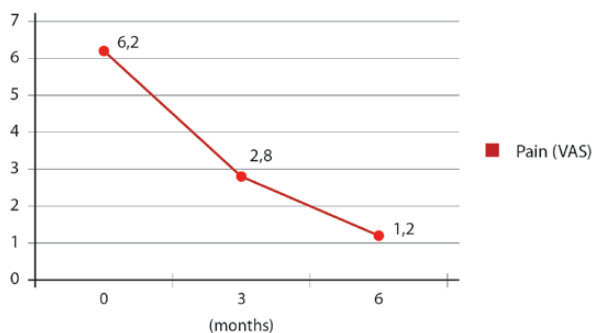


Figure 1. Evolution of pain (VAS).
 $p < 0.001$ Friedman test.

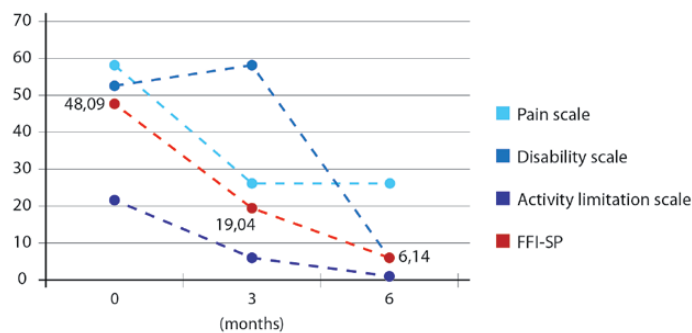


Figure 2. Evolution of the foot function index (FFI-Sp).
 $p < 0.001$ Friedman test.

CONCLUSION:

Tenflex® improves pain in 6 months, alone or in adjuvant to other alternatives, disability and limitation of mobility in patients with plantar fasciitis.