

MYOFASCIAL SELF-HELP THERAPY WITH A MINI FOOT ROLLER A PLANTAR FASCIA STUDY WITH A 4 WEEK FOLLOW UP, N=37

Christopher-Marc Gordon^{1,2}, Carmen Graf¹, Pedro Montoya³, Frank Andrasik⁴

¹ Center for Integrative Therapy, Ahorn Str. 31, 70597 Stuttgart, Germany

² Institute of Medical Psychology and Behavioral Neurobiology, University of Tübingen, Germany

³ Research Institute on Health Sciences (IUNICS), University of Balearic Islands, Palma, Spain

⁴ Department of Psychology, University of Memphis, USA



BACKGROUND:

Self-help therapy with a mini foot roller was performed on the foot fascia.

The aim of this pilot-study was to explore the outcome of the self-therapy effectively on psycho-physiological states through a tool assisted tissue manipulation.

METHODS:

37 post office workers were recruited at random, to perform a self-help therapy trial for three weeks with a small foam roller, the **BLACKROLL® MINI**.

The mini foot roller was used to work on the plantar fascia using body weight and leverage. All participants treated the plantar fascia of each foot for five minutes twice a day for three weeks.

RESULTS:

A significant reduction ($p < 0.05$) in the psychological states of dizziness, sorrow and in the physical states of restriction of life quality, as well as the feeling of stiffness and physical suffering were indicated.

The parameters of the follow-up questionnaire relating to physical condition, general pain, feelings of stress, metabolism, mood change and feelings of general energy improved and stabilised to the average of 40% to 60% four weeks after the self-treatment.

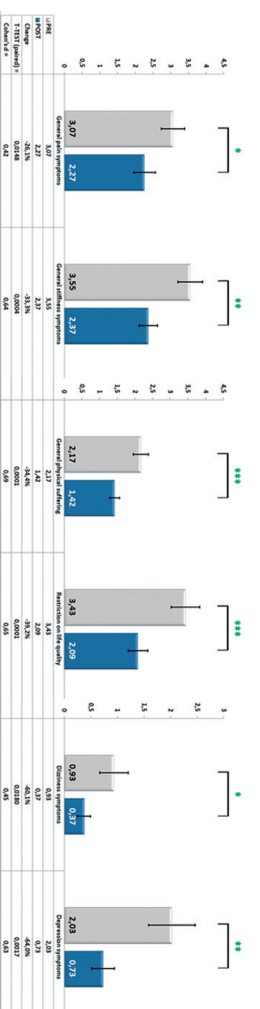
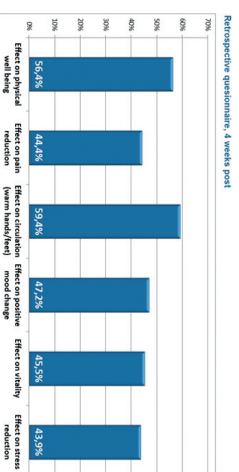
CONCLUSIONS:

A self-help therapy with a mini foot roller, if applied for ten minutes twice a day, may positively affect physiological and psychological states and can remain stable for a period of four weeks after the self-treatment.

Parameters of **momentary psychological and physiological states**, using a modified mind-body questionnaire including the Proof of Mood States (POMS), were selected before and after the three weeks of self-treatment. The questionnaire collects states of life quality, pain, stiffness, mobility, flexibility, coordination, stress behaviour and changes in mood.

A **follow-up questionnaire** was conducted four weeks after the intervention period. The objectives of the retrospective questionnaire were to evaluate and to determine a change in psycho-physiological states of the participants in the parameters physical condition, general pain, feelings of stress, circulation, metabolism, mood change, as well as feelings of general energy.

Statistical analysis included the paired t-test, Wilcoxon signed rank test and Cohen's d-test.



REFERENCES:

Curran PF, Fiore RD, Crisco JJ. A comparison of the pressure exerted on soft tissue by 2 myofascial rollers. Journal of sport rehabilitation, 17.4 (2008): 432. Hedley KC, Huffield DL, Blangpiet P, Dorfman LR, Riebe D. The effects of myofascial release with foam rolling on performance. The Journal of Strength & Conditioning Research 28.1 (2014): 61-68.

DISCLOSURE:

This study was undertaken in accordance with the Declaration of Helsinki and was financed through patient donations and **BLACKROLL®**.

ACKNOWLEDGEMENTS:

- **BLACKROLL®**: Jürgen Dürr
- Center for Integrative Therapy: Josip Sibenik