

THE ROLE OF FASCIA IN MUSICIANS UPPER EXTREMITY DYSFUNCTION AND PAIN

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BACKGROUND

Playing an instrument means countless amounts of repetitions and a high load for the performing hands. The repetitive movement overloading can result in various symptoms including deficits in motor control, loss of strength and endurance, numbness, tingling and pain.

The studies that have been done to find out the peripheral tissues and mechanics mostly involved in the production of these symptoms have not included the fascia.

METHODS

The study group consisted of eight symptomatic musicians (seven violinists and one pianist) and five asymptomatic violinists formed the control group. The study group musicians were 25.8 (± 4.0) year old women, who had been playing the same instrument for 19.3 (± 4.9) years and had had their upper extremity symptoms for 3.5 (± 3.1) years. The control group musicians were age matched women who had been playing the violin for 17.0 (± 1.8) years.

The disability in connection to playing the instrument caused by the upper extremity dysfunction was measured by VAS- scale 0-10 at the baseline and at the end of the study. Three grips were measured and their average value was compared between the two groups at the baseline and between the symptomatic and asymptomatic hand of the study groups' musicians also at the end of the study.

The study group musicians were evaluated and treated by three interventions with Fascial Manipulation® (FM) method within two months.

All the musicians who participated in the study were voluntary and gave their written approval for the use of the data.

RESULTS

The baseline disability was 8.50 (± 1.31) and at the end of the study 4.25 (± 1.83) showing a good effect of FM- treatment on the disability ($p = 0.011$). The baseline grip force difference between the symptomatic side of the study group and corresponding side of the control group showed statistically significant difference ($p = 0.012$). A notable improvement ($p = 0.019$) of grip strength of the symptomatic hand was at the end of the study. There was no significant difference in the grip strength between the asymptomatic side of the study group and the corresponding side of the control group ($p = 0.045$).

CONCLUSIONS

The fascia seems to play a role in the peripheral mechanical sensitisation and disability in cumulative stress disorders. Treatment aimed to restore fascial function had a favourable effect on the disability.

