

# Scientific Abstracts

## 24. Fibromyalgia

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### EFFECTS OF ORIGINAL REHABILITATION PROGRAMS IN PATIENTS WITH FIBROMYALGIA SYNDROME

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#### **Are you applying for a Travel Bursary?:** No

**Background:** Rehabilitation programs are recommended in the treatment of fibromyalgia syndrome (FM). Whole-body vibration (WBV) is a neuromuscular training method that has quickly gained in popularity in health and fitness centers. However, limited data are available about the benefits of WBV on physical function.

**Objectives:** The aim of this study was to investigate the effects of a training program with the Vibrosphere® in fibromyalgia patients. The Vibrosphere® is a hemispherical balance device with a vibrating platform. We have assessed the tolerance of the Vibrosphere® training sessions and which consequences it had on physical function and Quality of Life in fibromyalgia patients.

**Methods:** Ten women with FM (48 ± 10 years, 64 ± 16 kg) were included in this study. They attended twice weekly specific training on the Vibrosphere® (20-30 Hz in steps of 5 Hz, exercise duration: 30 seconds, and total working time: 12 minutes) for 6 weeks. Outcome measures were recorded before and after treatment by means of the Chair Rising Test, a static endurance test, a One Leg Balance Test, a measurement of 24 h energy expenditure and specific questionnaires (Fibromyalgia Impact Questionnaire, Fatigue Severity Scale, Borg Scale, Visual Analogue Scale, Tampa Scale for Kinesiophobia, Short-form 36 items Health Survey, Hospital Anxiety and Depression Scale).

**Results:** Benefits of aerobic rehabilitation in fibromyalgia patients have been documented previously [1]. In our study, physical functions (Chair Rising Test, endurance test, One Leg Balance test and 24 h energy expenditure) improved significantly ( $p < 0.05$ ) in patients with FM at the end of the training program. Questionnaire scores showed amelioration in Quality of Life and that the patients were favorable to benefit from additional training sessions.

**Conclusion:** This preliminary study showed that the Vibrosphere® training program was effective and the balance and physical functions in FM patients improved. Further studies are needed to confirm these results.

**References:** [1] Maquet D, Croisier JL, Demoulin C, Faymonville M, Crielaard JM. Value of aerobic rehabilitation in the management of fibromyalgia. Rev Med Liege. 2006;61:109-16.

**Has this abstract been identically presented or published before?:** No

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**Disclosure of Interest:** None Declared