

# Prevention of muscular strength and balance loss and osteoporosis using whole-body vibration in women with fibromyalgia

**Submission date**  
28/11/2007

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
12/02/2008

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
20/06/2012

**Condition category**  
Musculoskeletal Diseases

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Study website

<http://www.afycav.com>

## Contact information

### Type(s)

Scientific

### Contact name

Prof Narcis Gusi

### Contact details

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## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

## Secondary identifying numbers

11/05

# Study information

## Scientific Title

## Acronym

EVFEO/11/05

## Study objectives

1. Whole-body vibration exercise is effective in improving muscular strength in lower limbs and balance in women with fibromyalgia
2. Whole-body vibration exercise is effective in improving health related quality of life in women with fibromyalgia
3. Whole-body vibration is a cost-effective alternative compared to usual health care

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved by the Biomedic Ethical Committee of the University of Extremadura on 12/06/2005; reference number 11/05 (academic research funded in 2007).

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Prevention

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet.

## Health condition(s) or problem(s) studied

Fibromyalgia

## Interventions

Intervention group: Three sessions of whole-body vibration per week. Each session consisted of 6 repetitions at 12.6 HZ of whole-body vibration on reciprocal vibrating platform (Galileo 2000, Novotec. Germany). The feet of subject will be aligned perpendicular to usual use (this is a new technique). The time spent in each repetition will be increased 15 seconds every month from 30 second to 1 minute.

Control group: Usual care

### **Intervention Type**

Other

### **Phase**

Not Specified

### **Primary outcome measure**

The following will be assessed at baseline and 3 months:

1. Balance (Fall risk and postural stability) measured by Biodex Balance
2. Neuromuscular function (isokinetic measurements with surface electromyography measurements) measured by System-3 Biodex Dynamometer and MP100 Biopac
3. Fear to Fall Questionnaire (FES-I)
4. Health related Quality of life:
  - 4.1. EuroQol EQ-5D Instrument (utility index)
  - 4.2. Fibromyalgia Impact Questionnaire
  - 4.3. 15-D instrument (utility index)
  - 4.4. 36-item Short Form health survey (SF-36) (utility index)
5. Health system and societal costs
6. Pain threshold measured by algometer

### **Secondary outcome measures**

The following will be assessed at baseline and 3 months:

1. Hand-grip
2. Percentage of fat
3. Visual Analogue Scale for pain (0-10)
4. Visual Analogue Scale for general health (attached to EuroQOL 5D [EQ-5D])

### **Overall study start date**

30/11/2007

### **Completion date**

30/05/2008

## **Eligibility**

### **Key inclusion criteria**

1. Women who suffer fibromyalgia according to diagnosis by the American College of Rheumatology criteria
2. Older than 35 years

### **Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Female

**Target number of participants**

50

**Key exclusion criteria**

1. Contraindications to physical exercise
2. Other physical or psychological therapies different from usual care in the National Health Service (outpatient clinic)
3. Cognitive disease

**Date of first enrolment**

30/11/2007

**Date of final enrolment**

30/05/2008

**Locations****Countries of recruitment**

Spain

**Study participating centre**

Faculty of Sports Sciences

Caceres

Spain

10071

**Sponsor information****Organisation**

University of Extremadura (Spain)

**Sponsor details**

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**Sponsor type**

University/education

**Website**

<http://www.unex.es>

**ROR**

<https://ror.org/0174shg90>

## Funder(s)

**Funder type**

Government

**Funder Name**

Health & Dependence Department and Young & Sports Department of Junta de Extremadura (ref: 118/06) (Spain)

**Funder Name**

University of Extremadura (Spain)

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/08/2011		Yes	No
<a href="#">Results article</a>	results	01/02/2012		Yes	No