# Cost-effectiveness of exercise programmes to prevent low back pain and falls (I): lowfrequency vibratory exercise

Submission date 12/08/2009	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively regis</li> <li>Protocol</li> </ul>
<b>Registration date</b> 14/10/2009	<b>Overall study status</b> Completed	<ul> <li>[] Statistical analysis</li> <li>[X] Results</li> </ul>
Last Edited 21/08/2019	<b>Condition category</b> Musculoskeletal Diseases	[_] Individual participa

### Plain English summary of protocol

Not provided at time of registration

### Contact information

Type(s) Scientific

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#### **Contact details**

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## Additional identifiers

### EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers CEBP42/2006

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## Study information

#### Scientific Title

Cost-effectiveness of exercise programmes to prevent low back pain and falls (I): a blinded randomised controlled trial of low-frequency vibratory exercise

#### Acronym

Vibrobackpain

#### Study objectives

1. Low-frequency vibratory exercise will prevent moderate low-back pain

2. Low-frequency vibratory exercise will reduce the risk of falling in patients with low back pain

3. Low-frequency vibratory exercise is a cost-effective addition to usual care in patients with low back pain

### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Biomedical Ethical Committee of the University of Extremadura approved on the 10th October 2006 (ref: 42/2006)

#### Study design

Blinded randomised controlled trial

### Primary study design

Interventional

#### Secondary study design Randomised controlled trial

Study setting(s)

**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

Chronic low back pain

#### Interventions

The participants will be randomly assigned to intervention or control group by a random table built by computer:

1. Interventional group: Three-month progressive whole body vibration (WBV) programme set at 20 HZ , applied twice a week

#### 2. Control group: Care as usual

The treatment will last three months and patients will be followed up for one year.

#### Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome measure

Measured at baseline, three months, and one year:

1. Socio-sanitary costs

2. Functional and psychological disability in CLBP (using Roland-Morris questionnaire and Fear-Avoidance Beliefs Questionnaire [FABQ])

3. Health-related quality of life (using the EuroQoL questionnaire [EQ-5D]) and their utilities to health economic analyses

4. Fitness and neuromuscular function (using the tests of Sorensen, Ito-Shirado, straight leg raising and balance with Biodex Balance Platform)

#### Secondary outcome measures

Measured at baseline, three months, and one year:

1. Health related quality of life measured using the 36-item short form health survey (SF36) and the 15-D instrument

2. Grade of satisfaction with programme

3. The Start Back Tool (SBST) instrument to evaluate unspecified low back pain

#### Overall study start date

01/09/2009

#### **Completion date**

20/01/2010

## Eligibility

#### Key inclusion criteria

1. Patients with chronic low-back pain (CLBP) without major neurological alterations

2. Patient assessed by Pain Unit in Extremadura

3. Diagnosis of chronic low back pain (CLBP) according to "International Classification of Diseases, Ninth Revision (ICD-9)"

4. CLBP episodes for more than six months

5. Informed consent

6. Aged 40 to 70 years, male and female

Participant type(s) Patient

#### Age group

Adult

Both

**Target number of participants** 60 patients

**Total final enrolment** 50

#### Key exclusion criteria

Other major disease
 Regular physical activity more than one day a week in the last 5 years
 Any drug intake that may affect balance significantly - to avoid external influences

Date of first enrolment 01/09/2009

Date of final enrolment 20/01/2010

### Locations

**Countries of recruitment** Spain

**Study participating centre Faculty of Sport Sciences** Caceres Spain 10071

### Sponsor information

#### Organisation

University of Extremadura (Spain)

#### Sponsor details

Avda Elvas s/n Badajoz Spain 06071 +34 92 428 93 05 vicein@unex.es

**Sponsor type** University/education Website http://www.unex.es

ROR https://ror.org/0174shg90

### Funder(s)

**Funder type** Government

**Funder Name** Government of Extremadura and European Social Funds (Spain) (ref: PRI070B093)

**Funder Name** Goverment of Spain (Spain) - grant for a university research-professor student (FPU) (ref: AP2008-02211)

### **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?
<u>Results article</u>	results	01/07/2011	21/08/2019	Yes	No