# Effectiveness of a general neck exercise program, of acupuncture or of repetitive lowenergy shockwave therapy for chronic neck disorders

Submission date	Recruitment status	[X] Prospectively registered
14/12/2009	No longer recruiting	[_] Protocol
Registration date	Overall study status	Statistical analysis plan
04/01/2010	Completed	[] Results
Last Edited 04/01/2010	<b>Condition category</b> Musculoskeletal Diseases	Individual participant data
		[_] Record updated in last year

# Plain English summary of protocol

Not provided at time of registration

# **Contact information**

#### **Type(s)** Scientific

**Contact name** Prof Jan D Rompe

**Contact details** OrthoTrauma Evaluation Center Mainz Germany 55130

# Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

Secondary identifying numbers N/A

# Study information

### Scientific Title

Treatment of neck disorders with exercises, acupuncture or shockwave therapy: a randomised controlled trial

### **Study objectives**

Null hypothesis: A general neck exercise program, acupuncture and shockwave therapy produce equivalent outcomes at 4 months from baseline.

**Ethics approval required** Old ethics approval format

**Ethics approval(s)** Not provided at time of registration

**Study design** Randomised controlled trial

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Hospital

**Study type(s)** Treatment

#### 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 Neck disorders

### Interventions

General neck exercise program:

Posture correction techniques and active range of movement exercises are delivered. The active range of movement exercises prescribed are at the therapist's discretion, but can include flexion, extension, side flexion, and rotation. Posture correction will be taught in the context of functional and work activities.

Total duration of treatment: 4 weeks Total duration of follow-up: 15 months from baseline

Acupuncture:

We use single-use, sterile, silver-handle, prepacked needles without guide tubes. We base point

selection on individualised western acupuncture techniques by using a list of points previously reported as being effective in neck pain. The specific points for each individual are defined at each treatment session, depending on the patient's pain distribution and palpation of the neck and thorax to determine ah-shi points, or local tender points, for acupuncture. At least 1 distal point is used.

Total duration of treatment: 4 weeks Total duration of follow-up: 15 months from baseline

Shockwave therapy: Painful muscles are identified and tender points are treated with low-energy shockwave therapy (EFD = 0.1 mJ/mm^2, 2000 shocks per muscle, 3 sessions 1 - 2 weeks apart). Total duration of treatment: 4 weeks Total duration of follow-up: 15 months from baseline

### Intervention Type

Other

Phase Not Applicable

### Primary outcome measure

- 1. Neck pain on a 100 mm visual analogue scale
- 2. Disability assessed with the 100 point neck disability index

Measured at 2 months, 4 months and 15 months from baseline.

### Secondary outcome measures

Treatment satisfaction, assessed on a five point scale: 1 = very satisfied, 2 = satisfied, 3 = equivocal, 4 = unsatisfied, and 5 = very unsatisfied; Scores of 1 and 2 are classified as "satisfied" and scores of 4 and 5 as "unsatisfied.

Measured at 2 months, 4 months and 15 months from baseline.

### Overall study start date

01/03/2010

### **Completion date**

31/12/2012

# Eligibility

### Key inclusion criteria

1. Aged 18 years and older, either sex

2. Neck pain symptoms for longer than 3 months

3. Referred to therapy with a new episode of neck pain by their general practitioner (GP). Nonspecific neck pain is defined as pain and/or stiffness in the cervical spine, with or without unilateral arm pain, after the exclusion of red flags.

### Participant type(s)

Patient

### Age group

Adult

### Lower age limit

18 Years

Sex

Both

### Target number of participants

350

### Key exclusion criteria

1. Weight loss

2. Fever

3. Progressive neurological signs including bilateral arm pain

4. Evidence of muscle weakness or disturbance in normal sensation

5. History of malignancy, inflammatory arthritis, polymyalgia rheumatica, osteoporosis, or gross structural or neurologic abnormality affecting the neck

6. Contraindications to the study treatments (e.g., patients taking anticoagulants)

7. Any injury awaiting a compensation claim (e.g., deceleration or industrial injury)

8. Pregnancy

Date of first enrolment 01/03/2010

# Date of final enrolment 31/12/2012

# Locations

**Countries of recruitment** Germany

Luxembourg

**Study participating centre OrthoTrauma Evaluation Center** Mainz Germany 55130

# Sponsor information

Organisation

German and International Society for Extracorporeal Shock Wave Therapy (DIGEST) (Germany)

**Sponsor details** Kurfürstendamm 61 Berlin Germany 10707

**Sponsor type** Research organisation

Website http://www.digest-ev.de

### Funder(s)

**Funder type** Research organisation

### Funder Name

German and International Society for Extracorporeal Shock Wave Therapy (Deutsche und Internationale Gesellschaft für Extrakorporale Stoßwellentherapie [DIGEST]) (Germany)

### **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