Alexander technique versus targeted exercise for neck pain

Submission date 24/10/2020	Recruitment status No longer recruiting
Registration date 16/11/2020	Overall study status Completed
Last Edited 14/03/2022	Condition category Musculoskeletal Diseases

[] Prospectively registered

[] Protocol

[] Statistical analysis plan

[X] Results

[] Individual participant data

Plain English summary of protocol

Background and study aims

The Alexander technique addresses the distribution and adaptivity of postural tone during everyday activity. This is thought to ameliorate pains and problems brought about by faulty habits of posture and movement. The goal of this study is to determine if group Alexander technique classes are as effective as a targeted exercise program for reducing chronic neck pain.

Who can participate?

Any adults over the age of 18 who score above 16% on a neck pain questionnaire, have had neck pain for over 3-months, are not receiving specialized care, and can attend the classes are welcome to participate.

What does the study involve?

The study involves an initial baseline screening, either 10 Alexander Technique classes or exercises class, a screening immediately following the classes, and a final screening 6 weeks after the classes end. Each screening will take 1-hour and involves 2 questionnaires, an assessment to record neck muscle activity, and playing a video-game for 5 minutes.

What are the possible benefits and risks of participating? The possible benefits of the study are decreased neck pain and progressing the knowledge of interventions that may help with neck pain. The possible risks are increased neck pain or injury.

Where is the study run from? North Idaho Athletic Club (USA) and the University of Idaho (USA)

When is the study starting and how long is it expected to run for? From September 2017 to May 2018

Who is funding the study? University of Idaho (USA) Who is the main contact? Dr Raial Cohen rcohen@uidaho.edu

Contact information

Type(s) Scientific

Contact name Dr Rajal Cohen

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers 17-164

Study information

Scientific Title Alexander technique versus targeted exercise for neck pain

Study objectives

The Alexander Technique group, relative to the exercise group, will show reduced activity of the superficial neck flexors and reduced neck pain after the intervention.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 08/09/2017, University of Idaho Institutional Review Board (875 Perimeter Drive, Moscow, Idaho, 83844, USA; +1 208-885-6340; irb@uidaho.edu), ref: 010629

Study design

Two-group quasi-randomized pretest-posttest design

Primary study design

Interventional

Secondary study design Quasi-randomized controlled trial

Study setting(s)

Community

Study type(s) Treatment

Participant information sheet

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

Health condition(s) or problem(s) studied

Neck pain

Interventions

Participants will be assigned quasi-randomly to groups, based in part on their availability to attend either Monday-Wednesday or Tuesday-Thursday evening class sessions. One group will receive ten Alexander technique classes and the other group will ten receive exercise classes, over 5 weeks.

The AT classes will include information on basic biomechanical and ergonomic principles (including the anatomy of the neck, spine, and major joints of the upper and lower limbs) and benefits of widening awareness to include both the self and the environment during activity. In addition, participants will be guided in self-observation during common daily activities such as standing, sitting, computer work, personal care tasks, and household chores.

The exercise intervention exercises will be aimed at retraining the use of the deep cervical flexors, strengthening postural muscles, and increasing range of motion. The therapeutic retraining component will be based on an adaptation of the protocol described by Jull et al. Participants will place the backs of their necks on a rolled towel and gently rotated their heads as if nodding 'yes', with a goal of activating the deep cervical flexors rather than surface neck flexors. Postural strengthening exercises will include the use of dumbbells and resistance bands (Theraband®, Akron, OH) to target the trapezius and upper-back muscles. The trapezius and anterior neck muscles will be stretched to increase mobility. Each exercise class will include 10 minutes of light stretching, followed by 45 minutes of retraining and strength exercises aimed at promoting a more upright posture.

Follow-up measurements will be taken immediately after the interventions end, and 6 weeks after the interventions end.

Intervention Type

Other

Primary outcome measure

Neck disability measured using the Northwick park questionnaire at baseline, 5, and 11 weeks

Secondary outcome measures

1. Superficial muscle activity will be measured using the CCFT at baseline, 5, and 11 weeks 2. Self-efficacy will be measured using the Pain Self Efficacy questionnaire at baseline, 5, and 11 weeks

3. Intervention assessment will be measured using a questionnaire assessing impressions of the interventions will be administered after completion of the course

4. Video-game posture will be measured using photos at baseline, 5, and 11 weeks

Overall study start date 08/09/2017

Completion date

01/05/2018

Eligibility

Key inclusion criteria

1. Score 16% or higher on the Neck Disability Index

2. Had at least 3 months of neck pain

3. Not currently receiving specialized care

4. Available for the scheduled class times

Participant type(s)

Healthy volunteer

Age group

Adult

Sex Both

Target number of participants 30

Total final enrolment 16

Key exclusion criteria Does not meet inclusion criteria

Date of first enrolment 01/01/2018

Date of final enrolment 01/02/2018

Locations

Countries of recruitment United States of America

Study participating centre North Idaho Athletic Club 408 S Main St Moscow United States of America 83843

Study participating centre University of Idaho 875 Perimeter Dr Moscow United States of America 83844

Sponsor information

Organisation University of Idaho

Sponsor details 875 Perimeter Drive Moscow United States of America 83844 +1 208-885-6340 irb@uidaho.edu

Sponsor type Research council

Website http://www.uidaho.edu/

ROR https://ror.org/03hbp5t65

Funder(s)

Funder type University/education

Funder Name University of Idaho

Alternative Name(s) Uidaho, U of I, VANDALS, UI

Funding Body Type Government organisation

Funding Body Subtype Universities (academic only)

Location United States of America

Results and Publications

Publication and dissemination plan

Planned publication in an open-access journal.

Intention to publish date

01/11/2020

Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study are/will be available upon request from Rajal Cohen (rcohen@uidaho.edu) and will be shared by email. Individual requesting data may access the data indefinitely. Consent from participants was obtained and all the data has been de-identified.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>		19/05/2021	14/03/2022	Yes	No