Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

EFFECTIVENESS OF SUSTAINED NATURAL APOPHYSEAL GLIDES ON CERVICOGENIC HEADCHE IN FEMALE WITH CERVICOGENIC HEADCHE: A RANDOMIZED CONTROLLED TRIAL

Protocol summary

Study aim
The study was aimed to assess the effect of sustained natural apophyseal glides (SNAGs) in the treatment of cervicogenic headache

Design
Two arm parallel group randomised trial with blinded postoperative care and outcome assessment

Settings and conduct
The trial was completed at Safi Hospital Faisalabad. A sample of 40 female patients with cervicogenic headache aged 20 to 40 were randomly assigned into two groups, i-e 20 subjects to treatment group and 20 subjects to control group. SNAGs were applied to treatment group while control group was treated with placebo treatment

Participants/Inclusion and exclusion criteria
Inclusion Criteria • Females age group 20-40 years • Females with cervicogenic headache • Females with decreased range of motion of cervical region • Having at least one episode of CGH in previous 3 months Exclusion Criteria • Females with migraine and tension type headache • Females with herniated disc, fracture, radiculopathy and trauma • Females with known congenital, inflammatory and infectious conditions of cervical spine

Intervention groups
This group was treated with SNAG to relieve neck pain and headache. The SNAGs were applied for 20 minutes in each session to the treatment group, alternative three days per week, a total of 12 times for four weeks.

Main outcome variables
The VAS (visual analogue scale) and the NDI (neck weakness index) were used as main outcome measures

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200221046567N3**
Registration date: **2020-11-17, 1399/08/27**
Registration timing: **retrospective**

Last update: **2020-11-17, 1399/08/27**
Update count: **0**

Registration date
2020-11-17, 1399/08/27

Registrant information

Name
Muhammad Kashif

Name of organization / entity
Riphah International University

Country
Pakistan

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+92 41 8777210

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kashif.shaffi@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-03-01, 1397/12/10

Expected recruitment end date
2019-09-30, 1398/07/08

Actual recruitment start date
2019-03-01, 1397/12/10

Actual recruitment end date
2019-10-01, 1398/07/09

Trial completion date
2019-10-01, 1398/07/09

Scientific title

EFFECTIVENESS OF SUSTAINED NATURAL APOPHYSEAL GLIDES ON CERVICOGENIC HEADCHE IN FEMALE WITH CERVICOGENIC HEADCHE: A RANDOMIZED CONTROLLED TRIAL

Public title
EFFECTIVENESS OF SUSTAINED NATURAL APOPHYSEAL GLIDES ON CERVICOGENIC HEADCHE IN FEMALE WITH CERVICOGENIC HEADCHE
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Females age group 20-40 years with cervicogenic headache. Females with decreased range of motion of cervical region. Having at least one episode of CGH in previous 3 months
Exclusion criteria:
•Females with migraine and tension type headache •Females with herniated disc, fracture, radiculopathy and trauma •Females with known congenital, inflammatory and infectious conditions of cervical spine •Females with neurogenic problem and surgical record
Age
From **20 years** old to **40 years** old
Gender
Female

Phase
N/A
Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **40**
Actual sample size reached: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
Subjects were randomly assigned into two groups following simple randomization procedures (computerized random numbers)
Blinding (investigator's opinion)
Single blinded
Blinding description
The assessors of the study was kept blind of the treatment group to which the patient will be allocated.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research and Ethics Committee ,Riphah College of Rehabilitation Sciences, Pakistan.
Street address
Satiana Road
City
Faisalabad
Postal code
3800
Approval date
2019-02-15, 1397/11/26
Ethics committee reference number
RCRAHS/ERB/227

Health conditions studied

1

Description of health condition studied
CERVICOGENIC HEADCHE
ICD-10 code
G44.89
ICD-10 code description
CERVICOGENIC HEADCHE

Primary outcomes

1

Description
Pain
Timepoint
Baseline and 1, 2, 3 and end of intervention
Method of measurement
Visual Analogue Scale (VAS)

2

Description
Level of Neck Disability
Timepoint
Baseline and 1, 2, 3 and end of intervention
Method of measurement
Neck Disability Index (NDI)

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The SNAGs were applied for 20 minutes in each session to the treatment group, alternative three days per week, a total of 12 times for four weeks.
Category
Treatment - Other

2

Description
Control group: The control group received placebo treatment for 20 minutes, alternative three times per week, 2, a total of 12 times in four weeks
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Safi Hospital
Full name of responsible person
Muhammad Kashif
Street address
Satiana Road
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Riphah International University
Full name of responsible person
Muhammad Kashif
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
Riphah International University
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Riphah International University
Full name of responsible person
Muhammad Kashif
Position
Associate Professor
Latest degree
Master
Other areas of specialty/work
Physiotherapy
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable
Title and more details about the data/document
IPD collected for the primary outcome measure only
When the data will become available and for how long
starting 6 months after publication
To whom data/document is available
Academic institutions
Under which criteria data/document could be used
who want to compare/conduct studies on comparison of subtalar mobilization with conventional treatment for the management of CERVICOGENIC HEADCHE
From where data/document is obtainable
Principal Investigator by email: kashif.shaffi@gmail.com
What processes are involved for a request to access data/document
An email request to Principal Investigator email: kashif.shaffi@gmail.com
Comments