

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effect Of Sustained Natural Apophyseal Glide Versus Cervical Manipulation In Treatment Of Mechanical Neck Pain

Protocol summary

Study aim

To identify the effects of sustained natural Apophyseal glide versus Cervical Manipulation in treatment of Mechanical neck pain

Design

Randomized Clinical Trial, 50 subjects (25 in each group) will be randomly allocated, single blinded study

Settings and conduct

study conducted at KKT Orthopedic Spine Center and Royal Institute of Medical Sciences, Multan. Sample size will be 50 individuals (25 each group) conducted in time duration of 6 months. Group 1 patients got sustained natural Apophyseal glide and group 2 got cervical manipulation.

Participants/Inclusion and exclusion criteria

Inclusion criteria-1.- 50 patients both males and females with mechanical neck pain aged between 22 to 65 will be included. 2.- hypo-mobility of the cervical range of motion. 3.- Non-discogenic neck pain, stiffness, muscle tension, headache and migraine. Exclusion criteria-1.- Any contraindication to systemic manifestation (e.g. inflammation, infection, advanced degeneration, congenital malformation, trauma, cerebrovascular abnormalities). 2.- Positive neurological examination e.g. presence of positive motor reflex, or sensory abnormalities indicating spinal root compression. 3.- cervical spine surgery or stenosis, metabolic or systemic disorders or cancer.-.

Intervention groups

Group A Subjects will be treated with Sustained Natural Apophyseal Glide (SNAG) which included two sessions per week. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment. Procedure will be repeated in sets of 5 to 10. Group B Subjects will be treated with Cervical Manipulation after baseline treatment that is heating pad for 15 minutes which included two sessions per week.

Main outcome variables

pain, disability and cervical range of motion

General information

Reason for update

Acronym

RCT

IRCT registration information

IRCT registration number: **IRCT20191023045212N1**

Registration date: **2020-04-02, 1399/01/14**

Registration timing: **prospective**

Last update: **2020-04-02, 1399/01/14**

Update count: **0**

Registration date

2020-04-02, 1399/01/14

Registrant information

Name

Sana Altaf

Name of organization / entity

KKT Orthopedic Spine Center, Multan

Country

Pakistan

Phone

+92 61 4580119

Email address

altafsana66@gmail.com

Recruitment status

Not yet recruiting

Funding source

Expected recruitment start date

2640-10-11, 2019/07/19

Expected recruitment end date

2641-02-08, 2019/11/19

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect Of Sustained Natural Apophyseal Glide Versus Cervical Manipulation In Treatment Of Mechanical Neck Pain

Public title

Effect Of Sustained Natural Apophyseal Glide Versus Cervical Manipulation In Treatment Of Mechanical Neck Pain

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

- 44 patients both males and females with mechanical neck pain aged between 20 to 65 will be included
- hypo-mobility of the cervical range of motion
- Non - discogenic neck pain, stiffness, muscle tension, headache and migraine
- Comparable signs (pain associated with movement, or pain associated with specific functional activities.
- Painful cervical extension, local tenderness, and restricted inter-segmental motion.

Exclusion criteria:

- Any contraindication to systemic manifestation (e.g. inflammation, infection, advanced degeneration, congenital malformation, trauma, cerebrovascular abnormalities). Positive neurological examination e.g. presence of positive motor reflex, or sensory abnormalities indicating spinal root compression
- cervical spine surgery or stenosis ,metabolic or systemic disorders or cancer
- Any associated pathology of the upper cervical region or upper limb that may cause overlapping with the clinical finding as referred pain from costotransverse joint, rotator cuff tendonitis, and cervical rib syndrome.

Age

From **22 years** old to **65 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **50**

Randomization (investigator's opinion)

Randomized

Randomization description

The patients were randomly allocated into 2 groups to receive either the cervical manipulation or sustained natural Apophyseal glide .the randomization was done using lottery method

Blinding (investigator's opinion)

Single blinded

Blinding description

patients were blinded as they do not know there respected group,therapist who gave treatment and assess the outcome was blinded

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Riphah college of Rehabilitation and Allied Health Sciences

Street address

Quaid-e-Azam campus 28-M, Quaid-e-Azam ,Industrial Estate ,Kot Lakhpat ,Lahore.

City

Lahore

Postal code

54000

Approval date

2641-03-02, 2019/12/11

Ethics committee reference number

RCR&AHS/REC/MS-OMPT/O32

Health conditions studied

1

Description of health condition studied

Mechanical neck pain can be define as it is most common musculoskeletal irritation that originates from posterior side of skull bone and radiates towards lower region of cervical vertebra of backbone and sometimes it also migrate into shoulders and arms as well.Cervical region pain is a most general problem, having a point occurrence of almost 13% and prevalence for lifetime is about 50 %.Mechanical neck pain infers that the there are many sources of neck pain that pain may be the result of supporting structures of spine like muscles and ligaments

ICD-10 code

M54.2

ICD-10 code description

Cervicalgia

Primary outcomes

1

Description

pain will be primary outcome variable that will be measure by NPRS

Timepoint

outcome will be measured before the application of intervention and after 6 weeks of intervention application

Method of measurement

pain will be measure using NPRS,for cervical range of motion goniometer will be used,NDI for disability

Secondary outcomes

1

Description

cervical range of motion and function in patient with mechanical neck pain

Timepoint

cervical range of motion and function

Method of measurement

inclinometer and NDI questionnaire will be use to measure cervical range of motion and function.

Intervention groups

1

Description

Intervention group: Subjects will be treated with Sustained Natural Apophyseal Glide (SNAG) which included two sessions per week. Patients in this group will receive a baseline treatment that is heating pad for 15 minutes before the treatment. Procedure will be repeat in sets of 5 to 10 for 6 weeks

Category

Other

2

Description

Intervention group: Subjects will be treated with Cervical Manipulation after baseline treatment that is heating pad for 15 minutes which included two sessions per week for 6 weeks

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Kkt orthopedic spine center ,Multan

Full name of responsible person

Adeel Majeed

Street address

Al-Mustafa House , Gous-e-eAzam Road,Gilani Colony ,Multan.

City

Multan

Postal code

66000

Phone

+92 61 6304309

Fax

Email

adeel_majeed@hotmail.com

Web page address

<http://www.kktpakistan.com>

2

Recruitment center

Name of recruitment center

Royal Institute Of Medical Sciences ,Multan

Full name of responsible person

Dr Rabab Kompal

Street address

Bosan Rd, A Block Gulgasht Colony, Multan, Punjab

City

Multan

Postal code

66000

Phone

+92 61 6223345

Email

dogarz90@gmail.com

Web page address

<http://www.rims.edu.pk>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

RIMS,Multan

Full name of responsible person

Sana Altaf

Street address

tehsile chowk ,gulgasht,multan

City

Multan

Postal code

66000

Phone

+92 61 9200227

Fax

Email

rims.multan@yahoo.com

Web page address

<http://www.rims.edu.pk>

Grant name

Self

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

No

Title of funding source

Self

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

Persons

Person responsible for general inquiries

Contact

Name of organization / entity
RIMS,Multan
Full name of responsible person
Sana altaf
Position
Lecturer
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
Street address
GULGASHT ,Tehsile chowk ,multan
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multan
Province
punjab
Postal code
66000
Phone
+92 42 32591427
Email
rims.multan@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
RIMS,multan
Full name of responsible person
Sana altaf
Position
Lecturer
Latest degree
Bachelor
Other areas of specialty/work
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TEhsile chowk ,gulgashat ,multan
City
Multan
Province
punjab
Postal code
66000
Phone
+92 42 32591427
Email
rims.multan@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity
RIMS,Multan
Full name of responsible person
Sana Altaf

Position
lecturer
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
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Tehsile chowk ,gulgashat ,multan
City
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Province
punjab
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66000
Phone
+92 42 32591427
Email
rims.multan@yahoo.com

Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be 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

Yes - There is a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

Effect of sustained natural Apophyseal glide versus cervical manipulation in treatment of mechanical neck pain.50 patients were randomly allocated in this trial .Neck disability index ,Numeric pain rating score and Goniometry was used .

When the data will become available and for how long

after publication of this trial

To whom data/document is available

students,practionners

Under which criteria data/document could be used

for critical analysis of this trial

From where data/document is obtainable

altafsana66@gmail.com

What processes are involved for a request to access data/document

Applicant can request to access data through given Email address after 3 months of publication

Comments