Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 gilde 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 repeat 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
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Postal code
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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
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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
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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

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Person responsible for updating data

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Email
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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