Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effectiveness of Shacklock’s Neural Mobilization for Acute & Sub-acute Lumbar Disc Prolapsed.

Protocol summary

Study aim
To identify the effectiveness of Shacklock’s Neural Mobilization for acute and sub-acute lumbar disc prolapsed.

Design
Randomised, superiority, parrallel group randomised control trial with double blinded

Settings and conduct
The study will conduct at Musculoskeletal Outdoor Department of Center for the Rehabilitation of the Paralysed (CRP)-Mirpur and CRP-Savar.

Participants/Inclusion and exclusion criteria
Inclusion criteria: 1. Patients with acute and sub-acute LBP, diagnosed as lumbar disc prolapsed by MRI. 2. Patients with low back pain whose symptoms increase in closing movements like lumber extension or, reduce symptoms by opening movements like flexion of lumbar spine. 3. Age between 25 to 60 years. 4. Male and female both will be included. Exclusion criteria: 1. Patients with clinical disorders where physiotherapy is contraindicated. 2. Diagnosed from secondary complications such as fever, weight loss, tumors, Tuberculosis (TB) spine, fracture, dislocation, severe osteoporosis, Paget's disease, rheumatoid arthritis, ankylosing spondylitis, cauda-equina lesions, cord signs and syndrome, transverse myelitis and all sorts of infection. 3. Pregnant women. 4. Medically unstable, mental retardation, and unwillingness to participate in the study.

Intervention groups
Intervention: Intervention group will receive usual physiotherapy intervention and Shacklock’s neural mobilization. There are several progression of Shacklock's neural Mobilisation: Progression 1: Static Opener Progression 2: Dynamic Opener Progression 3: Treatment of interface dysfunction(Closing Mobilisation) Progression 4: Treatment of Neural dysfunction (Sliding & tension) Progression 5: Treatment of Multistructural dysfunction (Closing with tensioner)

Main outcome variables
1. Pain 2. Disability status

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20230105057050N1**
Registration date: **2023-01-17, 1401/10/27**
Registration timing: **prospective**

Last update: **2023-01-17, 1401/10/27**
Update count: **0**

Registration date
2023-01-17, 1401/10/27

Registrant information

Name
Zahid Bin Sultan Nahid

Name of organization / entity
Center for Physiotherapy & Mobility (CPM)

Country
Bangladesh

Phone
+880 1671-067313

Email address
ranacrpphysio@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-02-01, 1401/11/12

Expected recruitment end date
2023-03-02, 1401/12/11

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effectiveness of Shacklock’s Neural Mobilization for Acute & Sub-acute Lumbar Disc Prolapsed.

Public title

Efficacy of shacklock's neural mobilization intervention for reducing pain and disability for patients with lower back pain.

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

Patients with acute and sub-acute LBP, diagnosed as lumbar disc prolapsed by MRI. Patients with low back pain whose symptoms increase in closing movements like lumber extension or, reduce symptoms by opening movements like lumbar flexion of Lumber spine. Age between 25 to 60 years and both male and female will be included

Exclusion criteria:

Patients with clinical disorders where physiotherapy is contraindicated. Diagnosed from secondary complications such as fever, weight loss, tumors, Tuberculosis (TB) spine, fracture, dislocation, severe osteoporosis, paget‘s disease, rheumatoid arthritis, ankylosing spondylitis, cauda-equina lesions, cord signs and syndrome, transverse myelitis and all sorts of infection. Pregnant women. Medically unstable, mental retardation and unwillingness to participate in the study.

Age

From **25 years** old to **60 years** old

Gender

Both

Phase

1-2

Groups that have been masked

- Participant
- Outcome assessor

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description

This study will be a double-blinded, randomized controlled design. After initial screening, a computer-generated random number will use to allocate participants arbitrarily to the intervention group and control groups. Four Physiotherapists blinded to the allotment procedure administered the pretest and posttest assessments. Four physiotherapists will provide usual care and another four physiotherapists will provide Shacklock's neural mobilization with usual care. All the therapists who will administer treatment will not be blind but all have training in the study treatment protocol.

Blinding (investigator's opinion)

Double blinded

Blinding description

The assessor and participants are blinded in this study. Investigator employed four assessor for assessment whereas, pre-test and post-test data will be assessed by different assessor and assessors do not know the group allocation.

Placebo

Not used

Assignment

Parallel

Other design features

40

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Institutional Review Board (IRB), Bangladesh Health Professions Institute (BHPI).

Street address

CRP, Savar, Dhaka, Bangladesh.

City

Savar

Postal code

1343

Approval date

2022-10-25, 1401/08/03

Ethics committee reference number

CRP/BHPI/IRB/10/2022/668

Health conditions studied

1

Description of health condition studied

Lumbar Disc Prolapsed

ICD-10 code

M99.73

ICD-10 code description

Connective tissue and disc stenosis of intervertebral foramina of lumbar region

Primary outcomes

1

Description

Pain

Timepoint

Before intervention and 2 weeks after intervention.

Method of measurement

Dallas Pain Questionnaire using Visual Analogue Scale.

Secondary outcomes

1

Description
Disability score.
Timepoint
Before intervention and 2 weeks after intervention.
Method of measurement
Disability status by Oswestry Disability Index.

Intervention groups

1

Description
Intervention group
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Center for the Rehabilitation of the Paralysed (CRP), Savar
Full name of responsible person
Rumana Sharmin
Street address
CRP Road, PO: CRP-Chapain, Savar Union, Dhaka, Bangladesh
City
Savar
Postal code
1343
Phone
+880 1614-118881
Email
rumanaphysio@gmail.com
Web page address
https://www.crp-bangladesh.org/crp-center/crp-savar-head-office

2

Recruitment center
Name of recruitment center
Center for the Rehabilitation of the Paralysed (CRP), Mirpur.
Full name of responsible person
Nusrat Jahan
Street address
Plot A/5, Block A, Mirpur, Dhaka, Bangladesh
City
Dhaka
Postal code
1206
Phone
+880 1671-046445
Email
nusratphysio@yahoo.com
Web page address
https://www.crp-bangladesh.org/crp-center/crp-mirpur-dhaka

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Bangladesh Health Professions Institute (BHPI)
Full name of responsible person
Md. Shofiqul Islam
Street address
P.O CRP-Chapain, Savar, Dhaka, Bangladesh
City
Savar
Postal code
1343
Phone
+880 1730-059647
Email
shofiqul.islam@crp-bangladesh.org
Web page address
https://www.bhpi.edu.bd/
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Bangladesh Health Professions Institute (BHPI)
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
Bangladesh Health Professions Institute (BHPI)
Full name of responsible person
Md. Anwar Hossain
Position
Associate Professor of Physiotherapy
Latest degree
Ph.D.
Other areas of specialty/work
Physiotherapy
Street address
P.O CRP-Chapain, Savar, Dhaka, Bangladesh.
City
Savar
Province
Dhaka

Postal code
1343
Phone
+8802224445464
Email
anwar.hossain@crp-bangladesh.org
Web page address
http://www.bhpi.edu.bd

Person responsible for scientific inquiries

Contact
Name of organization / entity
Center for Physiotherapy & Mobility (CPM)
Full name of responsible person
Zahid Bin Sultan Nahid
Position
Consultant of Physiotherapy
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
CPM, 95 DIT Road, Malibagh, Dhaka, Bangladesh
City
Dhaka
Province
Dhaka
Postal code
1217
Phone
+880 1671-067313
Fax
Email
ranacrpphysio@gmail.com

Person responsible for updating data

Contact
Name of organization / entity
Center for Physiotherapy & Mobility (CPM)
Full name of responsible person
Zahid Bin Sultan Nahid
Position
Consultant of Physiotherapy
Latest degree
Master
Other areas of specialty/work
Physiotherapy
Street address
CPM, 95 DIT Road, Malibagh, Dhaka, Bangladesh
City
Dhaka
Province
Dhaka
Postal code
1217
Phone
+880 1671-067313
Fax
Email
ranacrpphysio@gmail.com
Web page address
https://www.cpmbd.com/

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
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Not applicable
Data Dictionary
Yes - There is a plan to make this available
Title and more details about the data/document
Name of file will be "Neural Mobilisation". Data will be shared on request to the principal investigator through email.
When the data will become available and for how long
Data will be available after the end of the study and after publication. Starting in January 2024 and data will be available for next five years.
To whom data/document is available
People working in academic institutions.
Under which criteria data/document could be used
The principal investigator will review the request and provide the information on the request for further research.
From where data/document is obtainable
Data will be obtainable through email to the principal investigator. Contact person: Zahid Bin Sultan Nahid, email: ranacrpphysio@gmail.com; zahidbinsultannahid@gmail.com, Mobile: +8801717704776; +8801671067313, website: cpmbd.com
What processes are involved for a request to access data/document
Data will be provided on request through email to the main investigator. email: ranacrpphysio@gmail.com; zahidbinsultannahid@gmail.com
Comments
This study will emphasize the new treatment protocol on lumbar disc prolapsed in acute and subacute stage.