

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 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 lumbar extension or, reduce symptoms by opening movements like lumbar flexion of Lumbar 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. Shofiquel Islam

Street address

P.O CRP-Chapain, Savar, Dhaka, Bangladesh

City

Savar

Postal code

1343

Phone

+880 1730-059647

Email

shofiquel.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.cpmdb.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: cpmdb.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.