Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effect of radial extracorporeal shockwave therapy for sciatic pain with disc herniation

Protocol summary

Study aim
The aim of this study to see the effect of radial extracorporeal shock wave therapy for sciatic pain with herniation Improve patients quality of life

Design
randomized clinical trails, parallel group single blinded with sample of 28 patients taking from single center

Settings and conduct
Data will be conducted from OPD of Physiotherapy department of Madinah Teaching Hospital. in this study patient will be blinded to their treatment

Participants/Inclusion and exclusion criteria
Patients of 30-45 years of age having moderate to sever low back and buttock pain runs down to the leg and have positive straight leg raising test and slump test and Patients have numbness or weakness and feeling of pins and needles in lower back, buttock, legs or feet and chronic condition last one to three months are included in the study Patients with acute pain, Spinal fractures, Previous history of any inflammatory disease, Presence of any implant, Pregnancy, Any malignant condition, Epiphyseal plate in the area, fixed contractures in lower limb, phobia from shockwaves, Any perceptive and cognitive disorders and Uncooperative patients are excluded from the study

Intervention groups
total 28 patients are included in the study which are equally divided into two group 14 patients in treatment group (A) that receives baseline treatment including moist hot packs and mechanical traction for 10 minutes and then perform McKenzie exercises and then apply radial extracorporeal shockwave with frequency of 5HZ and 1000 shocks/session, three sessions per week for one month and 14 patients in control group (B) that receives baseline treatment including moist hot packs for 10 minutes, mechanical traction for 10 minutes then do McKenzie exercises (extension approach) without application of shockwave therapy

Main outcome variables
pain, functional improvement

General information

Reason for update

Acronym
rESWT trial

IRCT registration information
IRCT registration number: **IRCT20210112050014N1**
Registration date: **2021-04-10, 1400/01/21**
Registration timing: **registered_while_recruiting**

Last update: **2021-04-10, 1400/01/21**
Update count: **0**

Registration date
2021-04-10, 1400/01/21

Registrant information

Name
Rafia Bibi

Name of organization / entity
The University Of Faisalabad

Country
Pakistan

Phone
+92 41 8868326

Email address
dpt-fa11-067@tuf.edu.pk

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-02-15, 1399/11/27

Expected recruitment end date
2021-05-15, 1400/02/25

Actual recruitment start date
empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Effect of radial extracorporeal shockwave therapy for sciatic pain with disc herniation

Public title

Effect of radial extracorporeal shockwave therapy for sciatic pain with disc herniation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Both males and females between the age of 30-45 years having low back pain patient with moderate to severe low back and buttock pain runs down to the leg and having positive straight leg raising test between the angle of 30 to 70 degree patients have numbness and weakness and feeling of pins and needles in affected leg and feet pain that worsen with movement chronic sciatic pain lasts for 1 to 3 months psychological stable patients

Exclusion criteria:

acute pain bilateral sciatica spinal fractures pregnancy previous history of any inflammatory disease presence of any implant epiphyseal plate in the area any malignant condition patients with fixed contractures in the lower limb patients having phobia with shockwaves

Age

From **30 years** old to **45 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **28**

Randomization (investigator's opinion)

Randomized

Randomization description

Randomization done through the computer generated system on openEpi website for sample size calculation

Blinding (investigator's opinion)

Single blinded

Blinding description

In this study patient will be blind. He/ she is not the one who will choose the treatment by themselves voluntarily. Treatment option will be written on two chits and patient will select one treatment chit.

Placebo

Not used

Assignment

Parallel

Other design features

N/A

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical committee of The University Of Faisalabad

Street address

Sargodha Road, University Town, Faisalabad, Punjab

City

Faisalabad

Postal code

38000

Approval date

2021-01-28, 1399/11/09

Ethics committee reference number

TUF/Dean/2021/06

Health conditions studied

1

Description of health condition studied

sciatic pain resulting from disc herniation

ICD-10 code

M54.30

ICD-10 code description

Sciatica, unspecified side

Primary outcomes

1

Description

pain

Timepoint

Pain will be measured at the time of initial assessment, then after two weeks and after fourth week

Method of measurement

Visual analogue scale consist of 0 to 10 numbering for measurement of pain intensity ask patients to select any number from 0 to 10

Secondary outcomes

1

Description

disability

Timepoint

Questioner will be used at the time of assessment then after two weeks and after fourth week

Method of measurement

The patient is instructed to put a mark next to each appropriate statement, at the beginning of treatment, a patient’s score was 12 and, at the conclusion of treatment, her score was 2 (10 points of improvement), we would calculate an 83% (10/12 x 100) improvement.

Intervention groups

1

Description
treatment group (A) receive baseline treatment include moist hot packs for 10 minutes at lower back then apply mechanical traction for 10 minutes then do shockwave therapy at paravertebral area of L4, L5 and S1 with frequency of 5 HZ and 1000 shocks/session then do McKenzie exercise (extension approach). total 3 sessions will be perform once a week for 4 weeks

Category
Rehabilitation

2

Description
Control group (B) receive baseline treatment includes moist hot pack for 10 minutes then apply mechanical traction for 10 minutes then do McKenzie exercises (extension approach) and shockwave therapy will not apply in control group. Total three sessions will perform per week for 4 weeks

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Madinah Teaching Hospital

Full name of responsible person
Dr. Rafia BiBi, PT

Street address
Sargodha Road, University Town, Faisalabad, Punjab

City
Faisalabad

Postal code
38000

Phone
+92 41 8868326

Email
dpt-fa11-067@tuf.edu.pk

Web page address
https://www.google.com/search?sxsrf=ALeKk035T3XJJSIJfGZ-BGDrVy4C6M6dRQ%3A1612034256438&ei=0LAVYMifGoGF1fAPq4-goAQ&q=the+university+of+faisalabad&gs_ssp=eJzj4tTP1TdIzqsqKDJg9JIpyUhVKM3LLEstKs4sqVTIT1NIS8wsTsxJTEpMAQAmHw6j&oq=the+university+of+&gs_lcp=CgZwc3ktYWIQARgBMgUILhCTAjICCC4yAgguMgIILjICCC4yCAguEMcBEK8BMgIILjICCC4yAgguMgIIADoECAAQRzoJCCMQJxBGEP8BOggIABAWEAoQHjoGCAAQFhAeOgcIIxDqAhAnOgQIIxAnOgoIABCxAxCDARBDOgQIABBDOgUIABCxAzoICAAQsQMQgwE6CwgAELEDEIMBEIsDOgUIABCRAjoICC4QsQMQgwE6BQguELEDOgoILhCxAxCDARBDOgcILhCxAxBDOgoILhCxAxBDEJMCUNvNCljsgwtgw5wLaAFwAngEgAHhA4gBsDySAQgyLTcuMTQuMTGYAQCgAQGqAQdnd3Mtd2l6wAEB&sclient=psy-ab

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
The University of Faisalabad

Full name of responsible person
Dr Nazia sarfraz

Street address
4 Km Sargodha Road, Health Sciences Wing, The University of Faisalabad

City
Faisalabad

Postal code
38000

Phone
+92 41 8868326

Email
nazia.sarfraz@tuf.edu.pk

Web page address
https://tuf.edu.pk

Grant name
N/A

Grant code / Reference number
N/A

Is the source of funding the same sponsor organization/entity?
No

Title of funding source
N/A

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
The University of Faisalabad

Full name of responsible person
Dr Nazia Sarfraz; PT

Position
Head of the Department Clinical Section

Latest degree
Master

Other areas of specialty/work
Musculoskeletal specialization

Street address
4 KM Sargodha road Health Sciences Wing The University of Faisalabad

City
faisalabad
Province
punjab
Postal code
38000
Phone
+92 41 8868326
Email
nazia.sarfraz@tuf.edu.pk

Person responsible for scientific inquiries

Contact
Name of organization / entity
The University of Faisalabad
Full name of responsible person
Dr Nazia Sarfraz
Position
Head of the Department, Supervisor
Latest degree
Master
Other areas of specialty/work
Musculoskeletal
Street address
4Km Sargodha road Faisalabad, Health sciences wing
The University of Faisalabad
City
Faisalabad
Province
punjab
Postal code
38000
Phone
+92 41 8868326
Email
nazia.sarfraz@tuf.edu.pk

Person responsible for updating data

Contact
Name of organization / entity
The University Of Faisalabad
Full name of responsible person
Dr. Rafia BiBi, PT
Position
Researcher
Latest degree
Bachelor
Other areas of specialty/work
Physiotherapy
Street address
street No.12, Khayaban Gardens Sargodha Road
Faisalabad
City
Faisalabad
Province
Punjab
Postal code
38000
Phone
+92 41 8868326
Email
dpt-fa11-067@tuf.edu.pk
Web page address
https://tuf.edu.pk

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
Not applicable
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