Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Comparative effect of janda's approach and burgger's exercise on clinical outcome in patient with lower cross syndrome: A Randomized control trial.

Protocol summary

Study aim
To compare effects of Janda’s approach with Bruegger’s exercise on clinical outcome in patient with lower cross syndrome.

Design
two arm parallel group randomized trial with single blinded and single center

Settings and conduct
Physiotherapy department of Dr. Khalid Clinic Lahore Pakistan

Participants/Inclusion and exclusion criteria
Participants: The calculated sample size using VAS as outcome measure is 33 in each Group After adding 20% dropout the sample size will be 33+6=39 in each group. Inclusion criteria: ■ Both male and females were included in study ■ Age 19 – 50 ■ Patients having low back pain more than three months ■ Patients having tight hip flexor (range of motion less than 30 degree) ■ Patients identified with lower cross syndrome ■ Samples have sitting duration more than six hours in their daily routine Exclusion criteria: ■ Grand multigravida ■ Pelvic inflammatory disease ■ Renal impairment ■ Arthritis ■ Pregnancy ■ Sciatica

Intervention groups
In Group-A janda’s approach was applied and in Group-B Bruegger’s exercises was used for treatment.

Main outcome variables
Quality of life Functional disability

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20220212054003N1**
Registration date: **2022-04-08, 1401/01/19**
Registration timing: **registered_while_recruiting**
Last update: **2022-04-08, 1401/01/19**
Update count: **0**

Registration date
2022-04-08, 1401/01/19

Registrant information

Name
Noor Ul ain

Name of organization / entity
The University of Lahore

Country
Pakistan

Phone
+92 321 9447169

Email address
noorulann20@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2022-03-20, 1400/12/29

Expected recruitment end date
2022-10-15, 1401/07/23

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Comparative effect of janda's approach and burgger's exercise on clinical outcome in patient with lower cross syndrome: A Randomized control trial.

Public title
Comparative effect of janda's approach and burgger's exercise in patient with lower cross syndrome: A

Randomized control trial

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Both male and female are included in studies Age 19 to 50 years Patient having low back pain more than three months Patient having tight hip flexor (range of motion less than 30 degree) Patient identified with low cross syndrome Samples having sitting duration more than six hours

Exclusion criteria:

Grand multigravida Pelvic inflammatory disease Renal impairment Arthritis Sciatica Pregnancy

Age

From **19 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Investigator

Sample size

Target sample size: **78**

Randomization (investigator's opinion)

Randomized

Randomization description

Non probability purposive sampling technique is used to admit patient into studies there were father randomized by lottery method, each member of the population is assigned a number, then these number were placed in a bowl. the researcher asked the patient to pick one slip than randomly allotted to intervention group A and intervention group B.

Blinding (investigator's opinion)

Single blinded

Blinding description

the assessor was an Orthopedic Doctor who was unaware of patient allotment in group A and B. He will assess patient at baseline and subsequent follow up.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical review committee of University of Lahore

Street address

University of Lahore defense road Lahore

City

Lahore

Postal code

58800

Approval date

2022-04-03, 1401/01/14

Ethics committee reference number

IRB-UOL-FAHS/899-IV/2021

Health conditions studied

1

Description of health condition studied

lower cross syndrome

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Quality of life

Timepoint

follow up at 2nd week and 4th week of intervention

Method of measurement

Questionnaire

2

Description

Functional disability

Timepoint

2nd week and 4th week of follow up

Method of measurement

Questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: Group-1 was given the treatment via Janda’s Approach Group received sensory motor training (static phase, dynamic phase, functional phase). Duration of the treatment lasted for 30 minutes, each exercise 10 seconds or less than 1 minutes.

Category

Rehabilitation

2

Description

Intervention group 2 : Group 2 received Bruegger’s exercise treatment. Patients were instructed to sit on the edge of the chair with their hips abducted, their feet externally rotated, their heads held up, their forearms supinated, their wrists and digits extended, and to slowly

exhale through their lips while actively laterally rotating their arms and spreading their digits. The patient is supposed to do this exercise once or twice every 20-30 minutes and hold the position for 30-60 seconds.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Dr Khalid clinic

Full name of responsible person
Noor ul Ain

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Cavalry Lahore

City
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
University of Lahore

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Noor ul ain

Street address
house 597 3c 1 Hashmi street Township Lahore

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54770

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Grant name

Grant code / Reference number

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

Title of funding source
University of Lahore

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
Other

Person responsible for general inquiries

Contact

Name of organization / entity
University of Lahore

Full name of responsible person
Noor ul ain

Position
student

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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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
Undecided - It is not yet known if there will be 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