

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

27 Jul 2026

### Effects of powerball in addition to routine physical therapy on pain, range of motion and functional disability in scapular dyskinesis

#### Protocol summary

##### Study aim

To compare the effects of Powerball in addition to routine physical therapy on pain, range of motion and functional disability in patients with scapular dyskinesis

##### Design

Randomized Controlled Trial; single-blinded; on 44 samples; parallel groups; randomized by computer-generated method and further concealed envelop method used for allocation in the group. In the envelope, 1 will be code for the control group and 2 will be code for the experimental group.

##### Settings and conduct

The study will be conducted at the Physiotherapy department THQ Khushab. The study will be single-blinded. The assessor will unaware of the treatment given to either group.

##### Participants/Inclusion and exclusion criteria

Inclusion Criteria: Age of 25- 50 years. Both gender Pre-Diagnosed cases of scapular dyskinesis A score of greater than or equal to 4/10 on Numeric Rating Pain Scale (NRPS) All types of scapular dyskinesis Exclusion Criteria: Previous cervical spine or shoulder surgery Presence of a severe systemic disease (as Systemic lupus erythematosus, Sickle cell disease) Participation in an exercise program for the scapular or shoulder muscles in the 6 months preceding the study Severe osteoporosis Whiplash injury/fracture

##### Intervention groups

Group B: (Experimental Group) Group B will receive Powerball intervention along with same conventional physical therapy as given in group A. 3 sessions will be given on alternate days each week, for next 4 weeks. 5-10 minutes Powerball intervention will be given in each session. The overall treatment session for this group lasts for 35-40 minutes.

##### Main outcome variables

pain, range of motion and functional disability

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20210321050752N3**

Registration date: **2023-03-08, 1401/12/17**

Registration timing: **registered\_while\_recruiting**

Last update: **2023-03-08, 1401/12/17**

Update count: **0**

##### Registration date

2023-03-08, 1401/12/17

##### Registrant information

##### Name

Muhammad Waqas

##### Name of organization / entity

The University of Lahore

##### Country

Pakistan

##### Phone

+92 42 36532841

##### Email address

drwaqasfayyaz@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-12-07, 1401/09/16

##### Expected recruitment end date

2023-05-07, 1402/02/17

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

## Scientific title

Effects of powerball in addition to routine physical therapy on pain, range of motion and functional disability in scapular dyskinesis

## Public title

Effects of powerball on pain, range of motion and functional disability in scapular dyskinesis

## Purpose

Treatment

## Inclusion/Exclusion criteria

### Inclusion criteria:

Age of 25- 50 years Both gender Pre-Diagnosed cases of scapular dyskinesis A score of greater than or equal to 4/10 on Numeric Rating Pain Scale (NRPS) All types of scapular dyskinesis

### Exclusion criteria:

Previous cervical spine or shoulder surgery Presence of a severe systemic disease (as Systemic lupus erythematosus, Sickle cell disease) Participation in an exercise program for the scapular or shoulder muscles in the 6 months preceding the study Severe osteoporosis Whiplash injury/fracture

## Age

From **25 years** old to **50 years** old

## Gender

Both

## Phase

N/A

## Groups that have been masked

- Outcome assessor

## Sample size

Target sample size: **44**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Patients were randomized by using the computer-generated method and further concealed envelop method is used for allocation in the group. In the envelop, 1 will be code for the control group and 2 will be code for the experimental group.

## Blinding (investigator's opinion)

Single blinded

## Blinding description

Assessor will only assess the patient at baseline and after follow-up for treatment outcomes. Assessor safe the data for follow-up and will not share it with any therapist or patient. At any stage, the assessor is unaware of the treatment and control group. The study was single-blinded. The assessor was unaware of the treatment given to either groups 1 or 2.

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

The rules and regulations set by the ethical committee of The University of Lahore will be followed.

##### Street address

RAIWIND ROAD CAMPUS: 1-Km, Raiwind Road, Near Thokar Niaz Big, Lahore

##### City

Lahore

##### Postal code

5400

##### Approval date

2022-12-07, 1401/09/16

##### Ethics committee reference number

REC.UOL.269.12.2022

## Health conditions studied

### 1

#### Description of health condition studied

Muscular dystrophy

#### ICD-10 code

G71.0

#### ICD-10 code description

Muscular dystrophy

## Primary outcomes

### 1

#### Description

Pain

#### Timepoint

Data will be collected at base line, at 2nd week and at 4th week after intervention

#### Method of measurement

Numeric pain rating scale to measure pain

### 2

#### Description

Functional Disability

#### Timepoint

Data will be collected at base line, at 2nd week and at 4th week after intervention

#### Method of measurement

The Shoulder Pain and Disability Index (SPADI)

### 3

#### Description

Scapular Range of Motion

#### Timepoint

Data will be collected at base line, at 2nd week and at 4th week after intervention

#### Method of measurement

To measure linear distance of scapula, tape is used to measure accurate up to 0.1 cm.

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: Group B: (Experimental Group)Group B will receive Powerball intervention along with same conventional physical therapy as given in group A. 3 sessions will be given on alternate days each week, for next 4 weeks.5-10 minutes Powerball intervention will be given in each session. The overall treatment session for this group lasts for 35-40 minutes.

#### Category

Rehabilitation

### 2

#### Description

Control group: Group A: (Control Group)Group A will receive conventional physical therapy (stretching exercises, mobility and strengthening exercise). Hot pack and Therapeutic ultrasound will be given for 8-10 minutes each in every session. This will be given up to three sessions per week on alternate days.Each session will last for 30 minutes.

#### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

THQ Hospital khushab

##### Full name of responsible person

Shahid Iqbal

##### Street address

THQ khushab, kushab sakesar road kushab (punjab)

##### City

Sargodha

##### Postal code

40600

##### Phone

+92 302 6039958

##### Email

shahidiqbalsa8@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Self Supported

#### Full name of responsible person

Kashaf Faraz

#### Street address

Rajab house jail road shahpur sadar

#### City

Sargodha

#### Postal code

40600

#### Phone

+92 304 6541357

#### Email

kashaffraz@gmail.com

#### Grant name

#### Grant code / Reference number

#### Is the source of funding the same sponsor organization/entity?

No

#### Title of funding source

Self Supported

#### 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

The University of Lahore

##### Full name of responsible person

Muhammad Waqas

##### Position

Lecturer

##### Latest degree

Master

##### Other areas of specialty/work

Physiotherapy

##### Street address

St# 76, H#09 Muhala Sirajpura Darogawala Shalamar Town Lahore

##### City

Lahore

##### Province

Punjab

##### Postal code

54840

##### Phone

+92 323 5043603

##### Email

drwaqasfayyaz@gmail.com

##### Web page address

<https://faculty.uol.edu.pk/Faculty/11621/Muhammad%20Waqas>

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

The University of Lahore

**Full name of responsible person**

Muhammad Waqas

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Neurological Physical Therapy

**Street address**

St# 76, H#09 Muhala Sirajpura Darogawala Shalamar

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## 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**

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**

Numeric pain rating scale will be used for the assessment of pain. Functional disability related data.

**When the data will become available and for how long**

6 months after publication.

**To whom data/document is available**

academic and clinical research writers.

**Under which criteria data/document could be used**

Never without permission.

**From where data/document is obtainable**

From Muhammad Waqas through mail id. drwaqasfayyaz@gmail.com or through a Researchgate account.

[https://www.researchgate.net/profile/Muhammad-Waqas-26?ev=hdr\\_xprf](https://www.researchgate.net/profile/Muhammad-Waqas-26?ev=hdr_xprf)

**What processes are involved for a request to access data/document**

From Muhammad Waqas through mail id. drwaqasfayyaz@gmail.com or through a Researchgate account.

[https://www.researchgate.net/profile/Muhammad-Waqas-26?ev=hdr\\_xprf](https://www.researchgate.net/profile/Muhammad-Waqas-26?ev=hdr_xprf)

**Comments**

## Person responsible for updating data

### Contact

**Name of organization / entity**

The University of Lahore

**Full name of responsible person**

Muhammad Waqas

**Position**

Lecturer

**Latest degree**

Master

**Other areas of specialty/work**

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