

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### effect of kabat technique vs facial neuromuscular re-education technique to reduce facial disability and synkinesis in bell's palsy patients

#### Protocol summary

##### Study aim

to compare the effect of kabat technique vs facial neuromuscular re-education technique to reduce facial disability and synkinesis in bell's palsy patients

##### Design

parallel group, single blinded, randomized control trial

##### Settings and conduct

OPD physiotherapy department mayo hospital

##### Participants/Inclusion and exclusion criteria

• INCLUSION CRITERIA: a) Age: 20-60 years b) Diagnosed cases of Bell's palsy c) Non traumatic origin d) onset(0-6 months ) • EXCLUSION CRITERIA: a) Psychiatric patients or non-cooperative patients b) Patients complaining of other neurological deficits c) Post-surgical cases d) Neurotemesis e) Upper motor neuron lesion f) Any underlying terminal disease

##### Intervention groups

group A kabat technique group B neuromuscular re-education technique

##### Main outcome variables

synkinesis and facial disability

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20220522054955N1**

Registration date: **2023-01-23, 1401/11/03**

Registration timing: **retrospective**

Last update: **2023-01-23, 1401/11/03**

Update count: **0**

##### Registration date

2023-01-23, 1401/11/03

##### Registrant information

##### Name

Rabia Rahim

##### Name of organization / entity

King edward medical university lahore

##### Country

Pakistan

##### Phone

+92 321 4558408

##### Email address

rabiarahim08@ymail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-04-05, 1401/01/16

##### Expected recruitment end date

2022-07-01, 1401/04/10

##### Actual recruitment start date

2022-04-11, 1401/01/22

##### Actual recruitment end date

2022-07-10, 1401/04/19

##### Trial completion date

2022-07-10, 1401/04/19

##### Scientific title

effect of kabat technique vs facial neuromuscular re-education technique to reduce facial disability and synkinesis in bell's palsy patients

##### Public title

effect of kabat technique vs facial neuromuscular re-education technique to reduce facial disability and synkinesis in bell's palsy patients

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

##### Inclusion criteria:

Age: 20-60 years Diagnosed cases of Bell's palsy Non traumatic origin onset(0-6 months

##### Exclusion criteria:

a) Psychiatric patients or non-cooperative patients

Patients complaining of other neurological deficit Post-surgical cases Neurotomesise Upper motor neuron lesion Any underlying terminal disease

#### Age

From **20 years** old to **60 years** old

#### Gender

Both

#### Phase

N/A

#### Groups that have been masked

- Participant

#### Sample size

Target sample size: **85**

Actual sample size reached: **70**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

it was a single blinded randomized control trial.. all the participants who came o physiotherapy department diagnosed with bells palsy were considered . 70 patients were allotted in two groups via lottery method

#### Blinding (investigator's opinion)

Single blinded

#### Blinding description

in this study participants are blinded for treatment technique. two different techniques were provided to patients and they were blind about that which technique is given to which patient

#### Placebo

Not used

#### Assignment

Parallel

#### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

advanced studies and research board

##### Street address

Neela Gumbad, New anarkali, Lahore

##### City

lahore

##### Postal code

36121

#### Approval date

2022-04-05, 1401/01/16

#### Ethics committee reference number

2543/KEMU/2022

## Health conditions studied

### 1

#### Description of health condition studied

Bells' palsy patients

#### ICD-10 code

G51

#### ICD-10 code description

Facial nerve disorders

## Primary outcomes

### 1

#### Description

facial disability

#### Timepoint

baseline, after three weeks and after 6 weeks

#### Method of measurement

facial disability index

### 2

#### Description

synkinesis

#### Timepoint

baseline,after 3 weeks and after 6 weeks

#### Method of measurement

sunny brook facial grading score

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Group A will receive the Kabat technique . Kabat et al. invented it. It is a manual resistance exercise that stimulates fundamental movement patterns, activates proprioceptors, accelerates the neuromuscular mechanism's response, and either promotes facilitation or inhibits it. It also improves flexibility, strength, and coordination. Conventional treatment includes: • Galvanic current interrupted by 100 milliseconds, rectangular waveform, three sets, and three contractions in each set • Facial massage by hand: effleurage, kneading, wringing, hacking, tapping, and stroking from finger to thumb are all forms of exercise. • For a total of six weeks, intervention was provided twice per week. One session of treatment lasted between 45 and an hour.

#### Category

Treatment - Devices

### 2

#### Description

Intervention group: Received neuromuscular re-education technique The patient was placed into one of four treatment-based categories—initiation, facilitation, movement control, and relaxation—based on their impairment on the Sunny Brook Facial Grading Scale

(SFGS). Conventional treatment includes: • Galvanic current interrupted by 100 milliseconds, rectangular waveform, three sets, and three contractions in each set • Facial massage by hand: effleurage, kneading, wringing, hacking, tapping, and stroking from finger to thumb are all forms of exercise. • For a total of six weeks, intervention was provided twice per week. One session of treatment lasted between 45 and an hour.

**Category**

Treatment - Devices

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

OPD physiotherapy department Mayo hospital lahore

**Full name of responsible person**

RABIA RAHIM

**Street address**

86-B rehman pura muslim town

**City**

lahore

**Postal code**

54000

**Phone**

+92 321 4558408

**Email**

rabiarahim08@ymail.com

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

king edward medical university

**Full name of responsible person**

dr muhammad iqbal

**Street address**

neela gumbad , new anarkali lahore

**City**

lahore

**Postal code**

36121

**Phone**

+92 300 8020301

**Email**

iqbaldr1069@gmail.com

**Grant name**

rabia rahim

**Grant code / Reference number**

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

Yes

**Title of funding source**

king edward medical university

**Proportion provided by this source**

20

**Public or private sector**

Public

**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**

king edward medical university

**Full name of responsible person**

Rabia Rahim

**Position**

student

**Latest degree**

Medical doctor

**Other areas of specialty/work**

physiotherapist

**Street address**

86-B rehman pura lahore

**City**

lahore

**Province**

punjab

**Postal code**

54000

**Phone**

+92 321 4558408

**Email**

rabiarahim08@ymal.com

**Person responsible for scientific inquiries**

**Contact**

**Name of organization / entity**

king edward medical university

**Full name of responsible person**

dr muhammad iqbal

**Position**

professor

**Latest degree**

Medical doctor

**Other areas of specialty/work**

orthopedic doctor

**Street address**

neela gumbad , new anarkali lahore

**City**

lahore

**Province**

punjab

**Postal code**

36121

**Phone**

+92 300 8020301

**Email**

iqbaldr1069@gmail.com

## Person responsible for updating data

### Contact

**Name of organization / entity**

king edward medical university

**Full name of responsible person**

Rabia Rahim

**Position**

student

**Latest degree**

Medical doctor

**Other areas of specialty/work**

physiotherapist

**Street address**

86 B rehman pura lahore

**City**

lahore

**Province**

punjab

**Postal code**

36121

**Phone**

+92 321 4558408

**Email**

rabiarahim08@gmail.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**

Yes - There is 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**

EFFECT OF KABAT TECHNIQUE AND FACIAL NEUROMUSCULAR RE-EDUCATION TECHNIQUE TO REDUCE FACIAL DISABILITY AND SYNKINESIS IN BELLS PALSY PATIENTS

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

study is completed and become available after its publication

**To whom data/document is available**

person in academic institute. patient data will not be shown

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

under the usage with terms in which journal is accessed / processed for publication it could be used on request

**From where data/document is obtainable**

from the university office and responsible supervisor and from journal we will process in future

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

can be on call or mail it will be only used in confidential way for improving research and benefit of humanity

**Comments**