

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Effectiveness of coordinative locomotor training on pain, balance and gait in chemotherapy induced peripheral neuropathy patients

#### Protocol summary

##### Study aim

To determine the effect of coordinative locomotor training on pain, balance and gait in chemotherapy induced peripheral neuropathy patients

##### Design

A randomized controlled trial with two parallel groups, a single blinded study of 3rd phase with 19 patients in each group which in total is 38

##### Settings and conduct

Allied Hospital Faisalabad, Madina teaching hospital Faisalabad. patients will be kept unaware which group they are allocated to.

##### Participants/Inclusion and exclusion criteria

- Age 35 to 60 years
- Both genders male and female
- Willing to participate in research
- Cancer patients of stage I-III
- Receiving neurotoxic drugs (platinum based, taxanes based or both in combination)
- Have received at least 4 cycles of chemotherapy treatment
- Having numbness and tingling in distal areas
- Pain in distal areas
- At medium (19-24) to high (<19) risk of fall according to POMA
- Able to communicate in Punjabi/Urdu/English
- Cognitive dysfunction (Mini-Mental State exam score < 24)
- Any recent major surgery
- Unhealed lower extremity fracture
- Having diabetic neuropathy before getting chemotherapy drugs
- Other neurological problems including brain cancer
- Cardiovascular diseases
- Bone metastasis
- Lower limb lymphedema
- Musculoskeletal problems
- Amputated limb
- with abnormal visual or auditory senses
- uncooperative patients

##### Intervention groups

Group A: coordinative locomotor training group. Group B: Conventional therapy group

##### Main outcome variables

1.pain 2.balance 3.gait

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20240311061260N1**  
Registration date: **2024-05-03, 1403/02/14**  
Registration timing: **prospective**

Last update: **2024-05-03, 1403/02/14**

Update count: **0**

##### Registration date

2024-05-03, 1403/02/14

##### Registrant information

##### Name

Aqsa Liaqat

##### Name of organization / entity

The University of Faisalabad

##### Country

Pakistan

##### Phone

+92 323 6002906

##### Email address

2022-ms-pt-047@tuf.edu.pk

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2024-05-06, 1403/02/17

##### Expected recruitment end date

2024-08-05, 1403/05/15

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Effectiveness of coordinative locomotor training on pain, balance and gait in chemotherapy induced peripheral

neuropathy patients

### Public title

Effectiveness of coordinative locomotor training on pain, balance and gait in chemotherapy induced peripheral neuropathy patients

### Purpose

Treatment

### Inclusion/Exclusion criteria

#### Inclusion criteria:

Age 35 to 60 years Both genders male and female  
Willing to participate in research Cancer patients of stage I-III Receiving neurotoxic drugs (platinum based, taxanes based or both in combination) Have received at least 4 cycles of chemotherapy treatment Having numbness and tingling in distal areas Pain in distal areas At medium (19-24) to high (<19) risk of fall according to POMA Able to communicate in Punjabi/Urdu/English

#### Exclusion criteria:

Cognitive dysfunction (Mini-Mental State exam score < 24)  
Any recent major surgery Having diabetic neuropathy before getting chemotherapy drugs Unhealed lower extremity fracture Other neurological problems including brain cancer Cardiovascular diseases Bone metastasis Lower limb lymphedema Musculoskeletal problems Amputated limb With abnormal visual or auditory senses Uncooperative patients

### Age

From **35 years** old to **60 years** old

### Gender

Both

### Phase

3

### Groups that have been masked

- Participant

### Sample size

Target sample size: **38**

### Randomization (investigator's opinion)

Randomized

### Randomization description

Participants selected through purposive sampling will be randomly allocated through lottery method to either interventional group or active control group.

### Blinding (investigator's opinion)

Single blinded

### Blinding description

The participant in this study will be blinded as they will be randomly allocated through lottery method

### Placebo

Not used

### Assignment

Parallel

### Other design features

## Secondary Ids

empty

## Ethics committees

## 1

### Ethics committee

#### Name of ethics committee

Research and Ethics/Technical Committee for the University of Faisalabad

#### Street address

University Avenue, Faisal Town Canal Road

#### City

Faisalabad

#### Postal code

38000

### Approval date

2024-02-17, 1402/11/28

### Ethics committee reference number

TUF/DR/SA/MSPP/2024/408

## Health conditions studied

## 1

### Description of health condition studied

Chemotherapy induced peripheral neuropathy

### ICD-10 code

G64

### ICD-10 code description

Other disorders of peripheral nervous system

## Primary outcomes

## 1

### Description

Pain

### Timepoint

Before treatment and at the end of 4 weeks of intervention

### Method of measurement

Numerical pain rating scale(NPRS) was used

## 2

### Description

Balance

### Timepoint

Before the treatment and at the end of 4 weeks of intervention

### Method of measurement

Performance oriented mobility assessment (POMA)

## 3

### Description

Gait

### Timepoint

Before the treatment and at the end of 4 weeks of intervention

### Method of measurement

Timed up and go test(TUG), F8WT(figure of 8 walk test)

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: Coordinative Locomotor Training group

#### Category

Treatment - Other

### 2

#### Description

Control group: conventional training (Reaching out with hands crossed in sitting position, Sitting and getting up from chairs of various heights, Stepping forward, backward and sideways, Toe standing, Standing balanced and straight, Standing up from chair walk a certain distance and return to sit down, Climbing stairs)

#### Category

Treatment - Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Allied Hospital Faisalabad

##### Full name of responsible person

Anbreena Rasool

##### Street address

Dr. Tusi Raod

##### City

Faisalabad

##### Postal code

38000

##### Phone

+92 345 7936825

##### Email

assistant.professor.rehab.419@tuf.edu.pk

##### Web page address

https://ahfsd.pk/

### 2

#### Recruitment center

##### Name of recruitment center

Madinah Teaching Hospital

##### Full name of responsible person

Anbreena Rasool

##### Street address

Sargodha road university town

##### City

Faisalabad

##### Postal code

38000

##### Phone

+92 345 7936825

#### Email

assistant.professor.rehab.419@tuf.edu.pk

#### Web page address

https://mth.org.pk/

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

The University of Faisalabad

##### Full name of responsible person

Anbreena Rasool

##### Street address

University Avenue, Faisal Town Canal road

##### City

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##### Postal code

38000

##### Phone

+92 345 7936825

##### Email

assistant.professor.rehab.419@tuf.edu.pk

##### Web page address

https://tuf.edu.pk/

#### Grant name

#### Grant code / Reference number

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

Yes

#### Title of funding source

The University of Faisalabad

#### 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

Aqsa Liaqat

##### Position

Student

##### Latest degree

Bachelor

##### Other areas of specialty/work

Physiotherapy

##### Street address

st.no.10 Mukhtar colony, Bhatta stop, Jhang road

##### City

Faisalabad

**Province**

Punjab

**Postal code**

38000

**Phone**

+92 335 7813723

**Email**

aqsa786liaqat@gmail.com

**Person responsible for scientific inquiries****Contact****Name of organization / entity**

The University of Faisalabad

**Full name of responsible person**

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Student

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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**

Yes - There is a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

Yes - There is a plan to make this available

**Title and more details about the data/document**

Effectiveness of Coordinative locomotor training on pain, balance and gait in chemotherapy induced peripheral neuropathy patients

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

Starting 6 months after publication and it will remain available for everyone

**To whom data/document is available**

This will be available for everyone

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

assistant.professor.rehab.419@tuf.edu.pk (mobile no. +92 345 7936825)

**From where data/document is obtainable**

aqsa786liaqat@gmail.com (mobile no. +92 335 7813723)

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

Any applicant just need to contact through email at aqsa786liaqat@gmail.com (mobile no. +92 335 7813723)

**Comments**