

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

10 Jun 2026

### Evaluation of the effect of kinesiology tape on pain and respiration of patients with rib fracture and flail chest

#### Protocol summary

##### Summary

Objectives: Evaluation of the effect of kinesiology tape on pain and respiration of patients with rib fracture and flail chest. Design: This is a randomized, blind, clinical trial. Participants: 32 blunt trauma patients with rib fracture that were admitted in Intensive Care Unit (ICU) of Shahid Rajaei Trauma Center were selected. Inclusion criteria: blunt trauma patients with rib fracture and/or flail chest. Exclusion criteria: multiple trauma; history of respiratory disease such as COPD and asthma; decreased level of consciousness. Intervention: All patients were managed by routine pain control protocols, and were stratified in two groups; for one group (17 persons) kinesiology tape was applied. Main Outcome Measures: pain degree using Visual Analog Scale (VAS) and arterial oxygen saturation using pulse oxymetry. Upon admission, one hour after taping, and before discharge, and ward and ICU admission were compared.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2017071634852N2**  
Registration date: **2017-09-15, 1396/06/24**  
Registration timing: **retrospective**

Last update:

Update count: **0**

##### Registration date

2017-09-15, 1396/06/24

##### Registrant information

###### Name

Mahnaz Bolandi

###### Name of organization / entity

Shiraz University of Medical Science

###### Country

Iran (Islamic Republic of)

###### Phone

+98 21 2290 0514

###### Email address

drmb100ph@gmail.com

###### Recruitment status

**Recruitment complete**

###### Funding source

Investigator

###### Expected recruitment start date

2015-03-20, 1393/12/29

###### Expected recruitment end date

2016-03-20, 1395/01/01

###### Actual recruitment start date

empty

###### Actual recruitment end date

empty

###### Trial completion date

empty

###### Scientific title

Evaluation of the effect of kinesiology tape on pain and respiration of patients with rib fracture and flail chest

###### Public title

Evaluation of the effect of kinesiology tape on pain and respiration of patients with rib fracture and flail chest

###### Purpose

Treatment

###### Inclusion/Exclusion criteria

Inclusion criteria: blunt trauma patients with rib fracture and/or flail chest. Exclusion criteria: multiple trauma; history of respiratory disease such as COPD and asthma; decreased level of consciousness.

###### Age

No age limit

###### Gender

Both

###### Phase

N/A

### Groups that have been masked

No information

### Sample size

Target sample size: 32

### Randomization (investigator's opinion)

Randomized

### Randomization description

### Blinding (investigator's opinion)

Not blinded

### Blinding description

### Placebo

Not used

### Assignment

Parallel

### Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Shiraz University of Medical Sciences

##### Street address

Central building of shiraz university of medical science, karimkhan zand blvd, shiraz

##### City

Shiraz

##### Postal code

##### Approval date

2016-08-23, 1395/06/02

##### Ethics committee reference number

IR.SUMS.MED.REC.1395.30

## Health conditions studied

### 1

#### Description of health condition studied

Trauma patients with rib fracture and/or flail chest

#### ICD-10 code

S22.4

#### ICD-10 code description

Multiple fractures of ribs

## Primary outcomes

### 1

#### Description

Pain degree

#### Timepoint

Upon admission, one hour after taping, before discharge

#### Method of measurement

VAS (Visual Analog System)

### 2

#### Description

Arterial oxygen saturation and respiratory function

#### Timepoint

Upon admission, one hour after taping, before discharge

#### Method of measurement

Pulse oxymetry

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In addition of routine pain control protocols, for interventional group Kinesiology tape on broken ribs was applied.

#### Category

Treatment - Other

### 2

#### Description

For control group, routine pain control protocols was applied, such as oxygen, pain killer drugs

#### Category

Treatment - Drugs

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Intensive Care Unit (ICU) of Shahid Rajaei Trauma Center

##### Full name of responsible person

##### Street address

##### City

Shiraz

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Shiraz University of Medical Sciences

##### Full name of responsible person

Dr.Sharareh Roshan Zamir

##### Street address

Physical medicine and rehabilitation ward, Faghihi hospital, Karimkhan zand boulevard,

##### City

Shiraz

#### Grant name

#### Grant code / Reference number

#### Is the source of funding the same sponsor

**organization/entity?**

Yes

**Title of funding source**

Shiraz University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

*empty*

**Domestic or foreign origin**

*empty*

**Category of foreign source of funding**

*empty*

**Country of origin****Type of organization providing the funding**

*empty*

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

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr.Mahnaz bolandi

**Position**

Physical medicine and rehabilitation spcialist

**Other areas of specialty/work****Street address**

Physical medicine and rehabilitation ward, Faghihi hospital, karimkhan zand boulevard

**City**

shiraz

**Postal code****Phone**

+98 71 3231 9040

**Fax****Email**

Drmb100ph@gmail.com

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

Shiraz University of Medical Sciences

**Full name of responsible person**

Dr.Sharareh roshan zamir

**Position**

Physical medicine and rehabilitation, assistance professor

**Other areas of specialty/work****Street address**

Physical medicine and rehabilitation ward, faghihi hospital, karimkhan zand boulevard

**City**

Shiraz

**Postal code****Phone**

+98 71 3231 9040

**Fax****Email**

Sharareh.rowshanzamir@gmail.com

**Web page address****Person responsible for updating data****Contact****Name of organization / entity****Full name of responsible person**

Dr.Mahnaz bolandi

**Position**

Physical medicine and rehabilitation spcialist

**Other areas of specialty/work****Street address****City**

Shiraz

**Postal code****Phone**

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**Fax****Email**

Drmb100ph@gmail.com

**Web page address****Sharing plan****Deidentified Individual Participant Data Set (IPD)**

*empty*

**Study Protocol**

*empty*

**Statistical Analysis Plan**

*empty*

**Informed Consent Form**

*empty*

**Clinical Study Report**

*empty*

**Analytic Code**

*empty*

**Data Dictionary**

*empty*