

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

01 Jul 2026

### The effect of abdominal massage on gastric residual volume and abdominal circumference of patients a

#### Protocol summary

##### Summary

This study is performed as a randomized, double blind clinical trial. The study population included patients admitted to intensive care units in two hospitals of Golestan and Imam Khomeini in Ahvaz. Eligible patients are randomly selected and randomly assigned to test and control groups. According to the studies, there are two types of abdominal massage, Classic abdominal massage and massage based on the tensegrity principle. The present study uses massage based on the tensegrity principle. This massage technique consists of 5 steps. The massage starts with brushing the skin in the abdominal area, second stage elastic deformation of the thoracolumbar fascia will be performed in the form of displacement, third stage The abdominal integuments is elastically deformed by kneading, The fourth stage involves shock movements along the armpit from top to bottom and down to the top and The last stage contains Elastic deformation of the muscles in the intercostal spaces. The patient's position is asleep to the back while undergoing massage. The angle between the bed and the patient's head is 30 to 45 degrees, and the patient's legs are placed on a pillow. This condition helps to relax the abdominal muscles. Massage is runs twice for each patient, Massage session lasts about 20 minutes. This action runs over 3 consecutive days. There is no intervention for the control group. every day, before and after the massage, gastric residual valuum and abdominal circumference Calculated and Compare.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2017062134641N2**

Registration date: **2017-07-26, 1396/05/04**

Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2017-07-26, 1396/05/04

##### Registrant information

###### Name

Alireza Abdi

###### Name of organization / entity

nursing and midwifery school, Kermanshah university of medical sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 83 3725 0111

###### Email address

arabdi@kums.ac.ir

##### Recruitment status

###### Recruitment complete

##### Funding source

Vice Chancellor for Research, Kermanshah University of Medical Sciences

##### Expected recruitment start date

2017-08-11, 1396/05/20

##### Expected recruitment end date

2017-11-11, 1396/08/20

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of abdominal massage on gastric residual volume and abdominal circumference of patients a

##### Public title

The effect of abdominal massage on the gastric residual valume

## Purpose

Supportive

## Inclusion/Exclusion criteria

Inclusion criteria: Having a nasogastric tube, Loss of consciousness, had not received radiotherapy treatment on the abdominal region in the previous 6 weeks, without intestinal obstruction, abdominal surgery, or diarrhea, Lack of Deep Venous Thrombosis, Not having an aneurysm, Not having ascites, Not receiving any effective gastrointestinal medicine  
Exclusion criteria: Transferring the patient to other wards, death, discharge, Take out the gastric tube, Patients have intra-abdominal pressure 12 mm Hg and patients with abdominal compartment syndrome

## Age

No age limit

## Gender

Both

## Phase

N/A

## Groups that have been masked

No information

## Sample size

Target sample size: 60

## Randomization (investigator's opinion)

Randomized

## Randomization description

## Blinding (investigator's opinion)

Double blinded

## Blinding description

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of Kermanshah University of Medical Sciences

##### Street address

Nursing Department, Kermanshah School of Nursing and Midwifery, Ashayer Blv.

##### City

Kermanshah

##### Postal code

6714634698

#### Approval date

2017-05-03, 1396/02/13

#### Ethics committee reference number

Kums.rec.1396.31

## Health conditions studied

### 1

#### Description of health condition studied

Acute pulmonary edema

#### ICD-10 code

150.1

#### ICD-10 code description

Left ventricular failure

### 2

#### Description of health condition studied

head trauma

#### ICD-10 code

s06.7

#### ICD-10 code description

Intracranial injury with prolonged coma

### 3

#### Description of health condition studied

Congestive heart failure

#### ICD-10 code

150.0

#### ICD-10 code description

Congestive heart failure

## Primary outcomes

### 1

#### Description

gastric residual volume

#### Timepoint

before and after intervention

#### Method of measurement

Using a special syringe for gavage

### 2

#### Description

abdominal circumference

#### Timepoint

before and after intervention

#### Method of measurement

Using a special flexible meter

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: According to the studies, there are two types of abdominal massage, Classic abdominal massage and massage based on the tensegrity principle. The present study uses massage based on the tensegrity

principle. This massage technique consists of 5 steps. The massage started with brushing the skin in the abdominal area, second stage elastic deformation of the thoracolumbar fascia was performed in the form of displacement, third stage The abdominal integuments were elastically deformed by kneading, The fourth stage involves shock movements along the armpit from top to bottom and down to the top and The last stage contains Elastic deformation of the muscles in the intercostal spaces. The patient's position is asleep to the back while undergoing massage. The angle between the bed and the patient's head is 30 to 45 degrees, and the patient's legs are placed on a pillow. This condition helps to relax the abdominal muscles. Massage is runs twice for each patient, Massage session lasts about 20 minutes in each day. This action runs over 3 consecutive days. every day, before and after the massage, gastric residual valuum and abdominal circumference Calculated and Compare. For abdominal circumference measurement, a 150-cm flexible measure will be used. The beginning point for the measurement is the umbilicus.

**Category**

Prevention

**2**

**Description**

Control group: The control group will receive usual care contain; Change position, Lavage, Gavage and etc.

**Category**

Prevention

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Ahvaz Golestan Hospital

**Full name of responsible person**

alireza abdi

**Street address**

ahvaz-Golestan region- farvardin street

**City**

ahvaz

**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Vice Chancellor for Research, Kermanshah University of Medical Sciences

**Full name of responsible person**

behrooz hamzeh

**Street address**

Shahid Beheshty BLV., Kermanshah University of Medical Sciences, Kermanshah

**City**

kermanshah

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Vice Chancellor for Research, Kermanshah 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**

Kermanshah School of Nursing and Midwifery

**Full name of responsible person**

alireza abdi

**Position**

PhD in Nursing Education-Faculty member

**Other areas of specialty/work**

**Street address**

Nursing Department, Kermanshah School of Nursing and Midwifery, Ashayer Blv. Kermanshah

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**Position**

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## Person responsible for updating data

### Contact

**Name of organization / entity**

Kermanshah School of Nursing and Midwifery

**Full name of responsible person**

alireza abdi

**Position**

PhD in Nursing Education, Faculty member

**Other areas of specialty/work**

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**City**

kermanshah

**Postal code**

00988338279394

## 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*