

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jul 2026

### The effect of body position on gastric residual volume in patients with mechanical ventilation hospitalized in intensive care unit

#### Protocol summary

##### Summary

This study is a triple group crossover clinical trial which is done on 90 patients hospitalized in intensive care units of educational hospitals affiliated to Kermanshah University of Medical Science. Patients who have the inclusion criteria to enter in to this study, are placed in 3 groups randomly. Patients who are in the first group, in the first gavage are placed in the supine position, the next gavage in the right lateral position and in the third gavage in the left lateral position. Then patients of the second group in the first gavage are placed in the right lateral position, the next gavage in the supine position, and in the third gavage in the left lateral position. Patients of the third group in the first gavage are placed in the left lateral position, the next gavage in the supine position and in the third gavage in the right lateral position. Before each feeding, first researcher measures the patients gastric residual volumes with standard gavage syringe and registers them. Then he feeds patients through nasal gastric tube and keeps them in the same positions for 3 hours. Two and three hours after keeping them in that very position he measures the gastric residual volumes of the patients again.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2014042617267N4**  
Registration date: **2014-05-23, 1393/03/02**  
Registration timing: **prospective**

Last update:

Update count: **0**

##### Registration date

2014-05-23, 1393/03/02

##### Registrant information

##### Name

Jahangir Rezaie

##### Name of organization / entity

Kermanshah University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 83 1828 2102

##### Email address

j-rezaie@kums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Kermanshah University of Medical Sciences

##### Expected recruitment start date

2014-07-23, 1393/05/01

##### Expected recruitment end date

2015-01-21, 1393/11/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of body position on gastric residual volume in patients with mechanical ventilation hospitalized in intensive care unit

##### Public title

The effect of body position on gastric residual volume

##### Purpose

Supportive

##### Inclusion/Exclusion criteria

Inclusion criteria: The patient with mechanical ventilation should be equipped 48 hours before intervention; Patient with nasal gastric tube and intestinal nutrition from 48 hours before intervention; Age between 18-65 years; Not pregnant patient; Patients who do not have any changing

status limitations; Patients who have G.C.S scores equal to or less than 7. Exclusion criteria: Using drugs which enhance bowel smoky shape movements during study for patients; Suffering diarrhea; Transfer the patients to the other units; Separation of the patients from mechanical ventilation; Patients death.

#### **Age**

From **18 years** old to **65 years** old

#### **Gender**

Both

#### **Phase**

N/A

#### **Groups that have been masked**

*No information*

#### **Sample size**

Target sample size: **90**

#### **Randomization (investigator's opinion)**

Randomized

#### **Randomization description**

#### **Blinding (investigator's opinion)**

Not blinded

#### **Blinding description**

#### **Placebo**

Not used

#### **Assignment**

Crossover

#### **Other design features**

### **Secondary Ids**

empty

### **Ethics committees**

#### **1**

##### **Ethics committee**

###### **Name of ethics committee**

Kermanshah University of Medical Sciences

###### **Street address**

Shahid Beheshti Blvd, Kermanshah

###### **City**

Kermanshah

###### **Postal code**

##### **Approval date**

2014-02-11, 1392/11/22

##### **Ethics committee reference number**

49402

### **Health conditions studied**

#### **1**

##### **Description of health condition studied**

The relationship between body position with gastric residual volume in hospitalized patients with mechanical ventilation.

##### **ICD-10 code**

w87

##### **ICD-10 code description**

Gastric contents

### **Primary outcomes**

#### **1**

##### **Description**

Gastric residual volume

##### **Timepoint**

Before, 2 and 3 hours after intervention.

##### **Method of measurement**

With standard gavage syringe

### **Secondary outcomes**

empty

### **Intervention groups**

#### **1**

##### **Description**

In this study, researcher placed the first group of the patients in the first gavage in the supine position, in the next gavage in the right lateral position, and the third gavage in the left lateral position. Meanwhile, before each feeding, first he measures the patients gastric residual volumes with the standard gavage syringe and registers them. Then he feeds them through nasal gastro tube and keeps them in the same position for 3 hours. Two and three hours after keeping them in that very position he measures their gastric residual volumes again.

##### **Category**

Treatment - Other

#### **2**

##### **Description**

In this study, researcher placed the second group of the patients in the first gavage in the right lateral position, in the next gavage in the supine position, and the third gavage in the left lateral position. Meanwhile, before each feeding, first he measures the patients gastric residual volumes with the standard gavage syringe and registers them. Then he feeds them through nasal gastro tube and keeps them in the same position for 3 hours. Two and three hours after keeping them in that very position he measures their gastric residual volumes again.

##### **Category**

Treatment - Other

#### **3**

##### **Description**

In this study, researcher placed the third group of the patients in the first gavage in the left lateral position, in the next gavage in the supine position, and the third gavage in the right lateral position. Meanwhile, before each feeding, first he measures the patients gastric residual volumes with the standard gavage syringe and registers them. Then he feeds them through nasal gastro tube and keeps them in the same position for 3 hours. Two and three hours after keeping them in that very

position he measures their gastric residual volumes again.

**Category**

Treatment - Other

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Educational hospitals affiliated to Kermanshah University of Medical Science, Kermanshah

**Full name of responsible person**

Houshang Kadivarian

**Street address**

Basije Streeth, Eslam Abade Gharb, Kermanshah

**City**

Eslam Abade Gharb

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Kermanshah University of Medical Sciences

**Full name of responsible person**

Dr Farid Najafi

**Street address**

Vice Research and Technology Affair, No 2 Building, Shahid Beheshti Blvd

**City**

Kermanshah

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

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 University of Medical Sciences

**Full name of responsible person**

Houshang Kadivarian

**Position**

Student of critical care nursing

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

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**Web page address**

*empty*

## **Sharing plan**

**Informed Consent Form**

*empty*

**Deidentified Individual Participant Data Set (IPD)**

**Clinical Study Report**

*empty*

*empty*

**Study Protocol**

**Analytic Code**

*empty*

*empty*

**Data Dictionary**

**Statistical Analysis Plan**

*empty*