

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jul 2026

### The effect of body position on gastric residual volume in patients undergoing mechanical ventilation in intensive care units.

#### Protocol summary

##### Summary

This study is a double group crossover clinical trial without blinding which is setup on 36 patients hospitalized in intensive care units of Besat hospital in Tehran, Iran. The purpose of this study is assessment the effect of body position on gastric residual volume in patients undergoing mechanical ventilation in intensive care units. Patients, who have the inclusion criteria of research are assigned to group A and group B pseudo randomly. On the first day of study, group A patients, are placed in the semi recumbent position after the first gavage, and in right lateral position after the second gavage with a washout period of 3 hours. Then, patients of group B, are placed in right lateral position after the first gavage and in semi recumbent position after the second gavage after 3 hours. Before each feeding, at first researcher measures the patient's gastric residual volume with standard gavage syringe and registers them. Finally, gastric residual volumes are compared in 2 groups in every mentioned position. All Patients feeding will be according to continuous bolus method. Meanwhile, patients apache3 score will be calculated and compared in 2 groups.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015110623446N6**  
Registration date: **2016-05-13, 1395/02/24**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2016-05-13, 1395/02/24

##### Registrant information

##### Name

Fatemeh Teymouri

##### Name of organization / entity

AJA University of Medical Sciences

##### Country

Iran (Islamic Republic of)

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##### Recruitment status

**Recruitment complete**

##### Funding source

This research has been funded by vice chancellor grant for research of AJA University of Medical Sciences

##### Expected recruitment start date

2016-03-15, 1394/12/25

##### Expected recruitment end date

2016-06-14, 1395/03/25

##### 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 undergoing mechanical ventilation in intensive care units.

##### Public title

The effect of body position on gastric residual volume

##### Purpose

Prevention

##### Inclusion/Exclusion criteria

Inclusion criteria: Patients, who are hospitalized in medical intensive care units; Age between 18-65 years; Feeding via naso-gastric tube; Patients, who are undergoing invasive mechanical ventilation 48 hours

before intervention; Taking no drugs that affect the gastric motility during recent week before intervention; Patients, who do not have acute gastric disorders; Patients, who are not pregnant; Patients, who do not have any limitation or contraindications of body change position. Exclusion criteria: Taking drugs that affect gastric motility during the study; Increase the level of conscious and the ability of eating during the study; Change of feeding route; Discharging or transferring of patient from intensive care unit during the study; Weaning of the patient from mechanical ventilation machine.

#### 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: **36**

#### Randomization (investigator's opinion)

Randomized

#### Randomization description

#### Blinding (investigator's opinion)

Not blinded

#### Blinding description

#### Placebo

Not used

#### Assignment

Crossover

#### Other design features

Allocate the groups into A and B will be according to pseudo randomization method.

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

Ethics committee of AJA University of Medical Sciences

##### Street address

AJA University of Medical Sciences, Etemadzadeh St, Fatemi St, Tehran

##### City

Tehran

##### Postal code

4813718414

#### Approval date

2016-02-15, 1394/11/26

#### Ethics committee reference number

IR.AJAUMS.REC.1394.48

## Health conditions studied

### 1

#### Description of health condition studied

relation between body position and gastric residual volume in patients undergoing mechanical ventilation in intensive care units

#### ICD-10 code

w78

#### ICD-10 code description

gastric content

## Primary outcomes

### 1

#### Description

Gastric residual volume

#### Timepoint

Before 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 patients in group A in semi recumbent position after the first gavage, and in right lateral position after next gavage for 3 hours. Meanwhile, before each feeding, first she measures the patient gastric residual volume with standard gavage syringe and registers them.

#### Category

Other

### 2

#### Description

In this study, researcher placed the patients in group B in right lateral position after the first gavage and in semi recumbent position after next gavage for 3 hours. Meanwhile, before each feeding, first she measures the patients gastric residual volume with standard gavage syringe and registers them.

#### Category

Other

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Besat hospital of Tehran

##### Full name of responsible person

Masoumeh kamali kalati

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Hejrat street, Takhti Y Track, Afsariye highway,  
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**Person responsible for scientific inquiries**

**Contact**

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Zahra Farsi

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Nursing PhD

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**Sponsors / Funding sources**

**1**

**Sponsor**

**Name of organization / entity**

Vice chancellor for research, AJA University of Medical Sciences

**Full name of responsible person**

Dr. Kamran Azma

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AJA University of Medical Sciences, Etemadzadeh St,  
Fatemi St, Tehran

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**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, AJA 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**

AJA University of Medical Sciences

**Full name of responsible person**

Shahla Aliyari

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PhD/ Research Manager

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**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*