

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

13 Jun 2026

### The effect of ultra filtration adjustment based on dry weight calculation by measuring serum sodium pre- dialysis on some of hemodialysis complications

#### Protocol summary

##### Summary

The aim of this clinical trial study is to determine the effect of ultrafiltration adjustment based on the dry weight calculation by measuring serum sodium pre-dialysis on some complications during hemodialysis. Population and sample: The study population will be patients undergoing hemodialysis who refer to 5th Azar hospital at the time of the study. 50 samples will be selected through convenience sampling. Then 25 patients will be allocated in intervention and control group randomly. Inclusion criteria include of a history of dialysis for at least one year; lack of diseases that cause fluid imbalance and exclusion criteria include disruption of blood flow through the fistula during the study. In the intervention group, the dry weight will be calculated using blood sodium before dialysis and then ultrafiltration set based on dry weight. In control group dry weight will be calculated in routine way and then hemodialysis complications will be measured in both groups. At the end of study two groups will be compared in terms of complications during hemodialysis.

#### General information

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT2015042318649N2**  
Registration date: **2015-09-09, 1394/06/18**  
Registration timing: **registered\_while\_recruiting**

Last update:

Update count: **0**

##### Registration date

2015-09-09, 1394/06/18

##### Registrant information

Name

Khadijeh Yazdi

##### Name of organization / entity

Golestan University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 17 1442 6900

##### Email address

yazdi@goums.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

Golestan University of Medical Sciences, Deputy of Research and Technology

##### Expected recruitment start date

2015-08-23, 1394/06/01

##### Expected recruitment end date

2015-11-21, 1394/08/30

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

The effect of ultra filtration adjustment based on dry weight calculation by measuring serum sodium pre-dialysis on some of hemodialysis complications

##### Public title

The impact of dry weight calculation by measuring serum sodium pre- dialysis on some of hemodialysis complications

##### Purpose

Supportive

##### Inclusion/Exclusion criteria

Inclusion criteria: history of dialysis more than one year;

Age of 18-65 years; be able to communicate verbally; lack of syndrome of inappropriate antidiuretic hormone secretion and diabetes insipidus; lack of human immunodeficiency virus infection; lack of mechanical ventilation; do not have heart and liver failure; lack of an overactive adrenal gland; do not use serotonin inhibitor drugs; do not use anti-spasmodic and anti-hypertensive drugs four hours before of dialysis. Exclusion criteria: The patient's unwillingness to continue for cooperating during the study; disruption of blood flow through the fistula.

#### 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: **50**

#### 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

Ethics Committee of Golestan University of Medical Sciences

##### Street address

Falsafi Educational Campus, Shastkola Road

##### City

Gorgan

##### Postal code

#### Approval date

2015-05-22, 1394/03/01

#### Ethics committee reference number

IR.goums.rec.1394.8

## Health conditions studied

### 1

#### Description of health condition studied

Renal failure

#### ICD-10 code

N18.5

#### ICD-10 code description

Chronic kidney disease, stage 5

## Primary outcomes

### 1

#### Description

Blood pressure disorders

#### Timepoint

At one hours interval during dialysis

#### Method of measurement

Blood pressure is measured using a sphygmomanometer

### 2

#### Description

Muscle cramps

#### Timepoint

At one hours interval during dialysis

#### Method of measurement

Using check list

### 3

#### Description

Nausea and vomiting

#### Timepoint

At one hours interval during dialysis

#### Method of measurement

Using check list

### 4

#### Description

Fatigue

#### Timepoint

At the end of dialysis

#### Method of measurement

Using Visual scale

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In the intervention group: The blood sodium levels will be measured pre - dialysis to calculate patients' dry weight and then ultrafiltration will be set based on dry weight and dialysis will be done for 12 weeks.

#### Category

Treatment - Other

### 2

#### Description

In the control group: Dry weight will be determined in routine way and accordingly the ultrafiltration rate will be

adjusted and patient will be dialysis for 12 weeks.

**Category**

Treatment - Other

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

5 Azar medical and educational center

**Full name of responsible person**

Sara Saadatmand

**Street address**

5 Azar Street

**City**

Gorgan

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

Golestan University of Medical Sciences, Deputy of research and technology

**Full name of responsible person**

Masoud Khosh Nia

**Street address**

Falsafi Educational Campus, Shastkola Road

**City**

Gorgan

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

Yes

**Title of funding source**

Golestan University of Medical Sciences, Deputy of research and technology

**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**

Golestan University of Medical Sciences

**Full name of responsible person**

Sara Saadatmand

**Position**

Student in Master of Science in Critical Care Nursing

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

Falsafi Educational Campus, Shastkola Road

**City**

Gorgan

**Postal code****Phone**

+98 17 3242 6900

**Fax****Email**

saadatmand.sara61@gmil.com

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

Golestan University of Medical Sciences

**Full name of responsible person**

Khadijeh Yazdi

**Position**

Assistance Professor of Medical Surgical Nursing

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

Falsafi Educational Campus, Shastkola Road

**City**

Gorgan

**Postal code****Phone**

+98 17 3242 6900

**Fax****Email**

yazdikh@yahoo.com

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

Golestan University of Medical Sciences

**Full name of responsible person**

Sara Saadatmand

**Position****Other areas of specialty/work****Street address****City****Postal code****Phone**

00

**Fax****Email****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*