

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

07 Jul 2026

### The effect of mixture of topical vitamin C solution to silver sulfadiazine ointment 1% in contrast only apply sulfadiazine ointment 1% on process of Burn wound changes in patients referring to Vasee hospital of Sabzevar

#### Protocol summary

##### Summary

General Purpose: Determining the effect of topical vitamin C solution on healing process second-degree burns. Vitamin C is a drug that has been used orally and intravenously to healing burn wound from the past, but the effects of its topical application remain unclear. In this study, after permission of Medical Ethics Committee at Sabzevar University of Medical Sciences, the researcher referred to the Vasee Hospital. After the explanations required for obtaining a letter of satisfaction of patients the Project began. In accordance with the sample size has been determined, 30 patients, who have been suffered burns (grade 2) and admitted in Vasee Hospital, were selected. According to the multiple factors involved in the restoration or wound infection, two research groups, were choosed parallel, so that the routine use of ointments (sulfadiazine) and the Vitamin C along with Silver sulfadiazine will be done on the same patient, but in the two symmetric or two separate parts of body. The Physician reviewers wounds has been blind. After washing and cleaning the wounds, dressing will replace daily. The wounds were examined on the days of first, third, seventh and fourteenth using the parameters of Bates-Jensen Wound Assessment Tool. The data was analyzed by SPSS version 20, using the ANOVA and repeated measurements tests. Inclusion criteria: 1. patients with second- degree burns range from 1% to 40 % of the body surface 2. Patient age 18-60 years old 3. Burn originated from hot fluids or heating source 4. Patient admitted to the hospital during the first 6 hours after burning Exclusion criteria: 1- Reluctance of patients to participate in this study.

#### General information

##### Acronym

#### IRCT registration information

IRCT registration number: **IRCT2015101224487N1**

Registration date: **2016-05-19, 1395/02/30**

Registration timing: **retrospective**

Last update:

Update count: **0**

#### Registration date

2016-05-19, 1395/02/30

#### Registrant information

##### Name

Hamid Robot Sarpooshi

##### Name of organization / entity

Sabzevar University of Medical Sciences

##### Country

Iran (Islamic Republic of)

##### Phone

+98 51 4421 7146

##### Email address

robatsarpushih1@medsab.ac.ir

#### Recruitment status

**Recruitment complete**

#### Funding source

Sabzevar University of Medical Sciences

#### Expected recruitment start date

2015-08-20, 1394/05/29

#### Expected recruitment end date

2015-12-20, 1394/09/29

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

## Scientific title

The effect of mixture of topical vitamin C solution to silver sulfadiazine ointment 1% in contrast only apply sulfadiazine ointment 1% on process of Burn wound changes in patients referring to Vasee hospital of Sabzevar

## Public title

The effect of topical vitamin C solution on burns wound healing

## Purpose

Health service research

## Inclusion/Exclusion criteria

Inclusion criteria: 1. patients with second- degree burns range from 1% to 40 % of the body surface 2. Patient age 18-60 years old 3. Burn originated from hot fluids or heating source 4. Patient admitted to the hospital during the first 6 hours after burning Exclusion criteria: 1. Reluctance of patients to participate in this study

## Age

From **18 years** old to **60 years** old

## Gender

Both

## Phase

2-3

## Groups that have been masked

*No information*

## Sample size

Target sample size: **30**

## Randomization (investigator's opinion)

Not randomized

## Randomization description

## Blinding (investigator's opinion)

Single 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 sabzevar University of Medical Sciences

##### Street address

Building number two, Vice Chancellor for Education, Sabzevar University of Medical Sciences and Health Services

##### City

Sabzevar

##### Postal code

9613873136

## Approval date

2015-07-15, 1394/04/24

## Ethics committee reference number

IR.MEDSAB.REC.1394.60

## Health conditions studied

### 1

#### Description of health condition studied

Burned patients

#### ICD-10 code

T30.2

#### ICD-10 code description

Burn of second degree, body region unspecified

## Primary outcomes

### 1

#### Description

Score of burn wounds

#### Timepoint

one, three, seven and Fourteen day after the burning.

#### Method of measurement

Bates-Jensen wound assessment tool

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

In the control group: Before the study, wounds were assessed based on the checklist and examined by a doctor. After washing with water and normal saline solution, the limb or a section of the burned wound dried with sterile gauze. Then silver sulfadiazine ointment 1% was laid by sterile gloves and burned wound was dressed. The maximum level of a limb which was compared with other organ or part of an organ was considered 20%. The depth of each of the areas that were compared were also quite similar. In this study wound healing was assessed on days 1, 3, 7 and 14 after burning. The checklists were completed and improvement of the two organs were compared with each other.

#### Category

Treatment - Drugs

### 2

#### Description

In the intervention group: Before the study, wounds were assessed based on the checklist and examined by a doctor. On the other limb or another part of the body that was under study, after washing and drying like the previous step, Vitamin C 10% solution was applied on the surface of the wound. Then silver sulfadiazine 1% ointment was laid by sterile gloves and burned wound

was dressed. The maximum level of a limb which was compared with other organ or part of an organ was considered 20%. The depth of each of the areas that were compared were also quite similar. In this study wound healing was assessed on days 1, 3, 7 and 14 after burning. The checklists were completed and improvement of the two organs were compared with each other.

**Category**

Treatment - Drugs

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

Sabzevars Vasee Hospital

**Full name of responsible person**

Hamid Robot Sarpooshi

**Street address**

Next to health Park of Sabzevar

**City**

Sabzevar

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

Vice President of Research, Sabzevar University of Medical Sciences

**Full name of responsible person**

Mr. Musa al-Reza Tadayonfar

**Street address**

Building Number two,Vice Chancellor for Education,Sabzevar University of Medical Sciences and Health services

**City**

Sabzevar

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

Yes

**Title of funding source**

Vice President of Research, Sabzevar 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**

Sabzevar University of Medical Sciences

**Full name of responsible person**

Hamid Robot Sarpooshi

**Position**

Master of Nursing

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

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Forough Mortazavi

**Position**

ph.d, Maternal health

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**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*