

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Jul 2026

Comparing the effect of active cooling and wet sponging to reduce the body temperature in Intensive Care Unit febrile patients: A factorial design

Protocol summary

Summary

This study will be done by the aim of comparing the effects of active cooling and wet sponging to reduce the body temperature of febrile patients who are admitted to Qazvin city intensive care units. Inclusion criteria are patients who are admitted to intensive care units in Qazvin educational hospitals with tympanic temperature on 38.3 and below 40 degrees centigrade and between 18 and 65 years of age, exclusion criteria are steroid prescription, reaching the fever above 40 degrees and shivering. Study population are patients who are admitted to intensive care unit health centers affiliated to Qazvin University of Medical Sciences with tympanic temperature above 38.3 degrees centigrade. The study is carried out in four groups of 18 and a total sample size of 72. One group will receive just wet sponging. The second group will be directed to the flow of air at room temperature. The third one will receive a combination of those two methods and the forth will received no physical treatment to reduce fever. All four groups will receive acetaminophen 30 minutes after fever onset and interventions will be started immediately in the three intervention groups. In all groups, interventions will be continued until tympanic temperature will reduce to 37 degrees or 4 hours passed from the start of the intervention, patient`s vital sign will record every 30 minutes and reduce fever as the primary outcome is checked

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012092910963N1**

Registration date: **2013-02-15, 1391/11/27**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2013-02-15, 1391/11/27

Registrant information

Name

Marjan Haghi

Name of organization / entity

Qazvin University of Medical Sciences

Country

Iran (Islamic Republic of)

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+98 28 1333 8034

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mhaghi@qums.ac.ir

Recruitment status

Recruitment complete

Funding source

thesis

Expected recruitment start date

2012-10-22, 1391/08/01

Expected recruitment end date

2013-06-20, 1392/03/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of active cooling and wet sponging to reduce the body temperature in Intensive Care Unit febrile patients: A factorial design

Public title

Active cooling effect on fever reduction

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: patients who are admitted to intensive care units in Qazvin educational hospitals; Tympanic temperature on 38.3 and below 40 degrees centigrade; above 18 and below 65 years of age; Do not having AIDS; non pregnant; do not having renal failure; do not receive chemotherapy; do not having acute electrolyte disorders; do not receive steroid; do not having respiratory infections; do not having severe diarrhea; have adequate hydration; do not received blood products in the past 24 hours; do not received Ayntalpyd in the past 24 hours; more than 24 hours of starting treatment with antibiotics is passed. Exclusion criteria: Reaching the fever above 40 degrees centigrade; All confirmed and suspected cases of fever due to hypothalamic dysfunction; different physical method which is prescribed by the physician; antibiotic change in the 4-hour intervention; Ayntalpyd and blood products administered during the intervention; any changes in ventilation; shivering.

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: **72**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Factorial

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Qazvin university of medical sciences

Street address

Shahid Bahrar Blv

City

Qazvin

Postal code**Approval date**

2012-12-03, 1391/09/13

Ethics committee reference number

D/20/5256

Health conditions studied**1****Description of health condition studied**

Fever

ICD-10 code

R50

ICD-10 code description

Fever of other and unknown origin

Primary outcomes**1****Description**

tympanic temperature

Timepoint

every 30 minutes until 4 hours

Method of measurement

degrees centigrade

Secondary outcomes**1****Description**

shivering

Timepoint

every 30 minutes until 4 hours

Method of measurement

observation

Intervention groups**1****Description**

wet sponging Intervention group: In this case the temperature of water will be one degree lower than ambient temperature and the standard gas is used.

Category

Treatment - Other

2**Description**

Intervention airflow group: The direct flow of air at room temperature is given. In this method, the upper half of the body and legs from the knee to the down will be exposed to the airflow of Pars Khazar fan 3010 model with rotation speed of 1025 rpm, the air velocity of 205 meters per minute, air volume of 54 cubic meters per minute. In this way, the fan is placed at a distance of 30 cm at the bottom of the patient's foot.

Category

Treatment - Other

3

Description

3 rd Intervention group : combination of air flow and fanning

Category

Treatment - Other

4

Description

control group : no physical treatment

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Bou Ali Sina Hospital

Full name of responsible person

Marjan Haghi

Street address

Bou Ali Street

City

Qazvin

2

Recruitment center

Name of recruitment center

Velayat Hospital

Full name of responsible person

Marjan Haghi

Street address

Taavon Square, 22 Bahman Blv, Elahyeh

City

Qazvin

3

Recruitment center

Name of recruitment center

Kowsar Hospital

Full name of responsible person

Marjan Haghi

Street address

Kowar Alley, Shahid Taleghani Street

City

Qazvin

4

Recruitment center

Name of recruitment center

Shahid Rajaee Hospital

Full name of responsible person

Marjan Haghi

Street address

Padegan Street

City

Qazvin

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice-chancellor for research - Qazvin University of Medical Science

Full name of responsible person

Dr. Saeed Asef Zadeh

Street address

Vice-chancellor for research, Qazvin University of Medical Sciences, Bahonar Bla, Qazvin

City

Qazvin

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 - Qazvin University of Medical Science

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

Qazvin university of medical sciences

Full name of responsible person

marjan haghi

Position

Student

Other areas of specialty/work

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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