

Clinical Trial Protocol

Iranian Registry of Clinical Trials

09 Jun 2026

The effects of sauna on pain relief and range of motion in rheumatoid arthritis patients

Protocol summary

Summary

The present study investigated the effect of sauna on pain and joint range of motion in patients with rheumatoid arthritis. In this randomized clinical trial, 45 patients with rheumatoid arthritis, who were referred to medical centers in Mashhad and meet eligibility criteria were assigned into one of following three groups. The patients in the intervention group used Sauna either one time or twice a week, each for 10 minutes for 28 days. The patients in the control group didn't use sauna. The severity of pain was measured on 1, 15, and 28 days after the intervention for all groups and 16 and 22 days for the intervention group. Joint range of motion was measured by goniometer before and after the intervention.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201008274115N1**

Registration date: **2010-08-27, 1389/06/05**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2010-08-27, 1389/06/05

Registrant information

Name

Amir Tabatabaee

Name of organization / entity

Islamic Azad University- Quchan Branch

Country

Iran (Islamic Republic of)

Phone

+98 51 3726 2676

Email address

tabatabaee_amir@yahoo.com

Recruitment status

Recruitment complete

Funding source

Islamic Azad University, Quchan branch

Expected recruitment start date

2004-06-24, 1383/04/04

Expected recruitment end date

2005-10-15, 1384/07/23

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effects of sauna on pain relief and range of motion in rheumatoid arthritis patients

Public title

The effects of sauna on pain join in rheumatoid arthritis patients

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria: male, age 25 years, having no history of cardiovascular disease and respiratory complications and renal function, drug addiction or abuse, lack of disasters and severe cases Aztrabangyz In the past month Exclusion criteria: changing in the number or type of drugs during the study

Age

From **32 years** old to **72 years** old

Gender

Male

Phase

1

Groups that have been masked

No information

Sample size

Target sample size: 45

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

School of Nursing, Mashhad University of Medical Sciences,

Street address

Doctora Cross, Ebnesina street

City

Mashhad

Postal code

9137913199

Approval date

1994-09-29, 1373/07/07

Ethics committee reference number

4557/117

Health conditions studied

1

Description of health condition studied

Rheumatoid arthritis

ICD-10 code

M06.9

ICD-10 code description

Rheumatoid arthritis, unspecified

Primary outcomes

1

Description

pain

Timepoint

3-7 days

Method of measurement

pain scale

2

Description

range of motion

Timepoint

3-7 days

Method of measurement

gonyometer

Secondary outcomes

1

Description

pulse rate

Timepoint

30 min

Method of measurement

touch

2

Description

Blood pressure

Timepoint

30 minutes

Method of measurement

sphygmomanometer

Intervention groups

1

Description

Dry sauna bath, 90 ° C heat and cold shower, 10 minutes, once a week

Category

Other

2

Description

Dry sauna bath, 90 ° C heat and cold shower, 10 minutes, twice a week

Category

Other

3

Description

The control group did not use the sauna bath.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Ghaem Hospital

Full name of responsible person

Dr. Saghafi

Street address

Ghaem Hospital, Ahmadabad street

City

Mashhad

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University-Quchan branch

Full name of responsible person

Amir Tabatabaee

Street address

Nursing Group, Islamic Azad University

City

Quchan

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Islamic Azad University-Quchan branch

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

Gonabad University of Medical Sciences

Full name of responsible person

Ali Mohmmadpour

Position

PhD of Nursing - Faculty Member

Other areas of specialty/work

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Person responsible for scientific

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Contact

Name of organization / entity

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Full name of responsible person

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Position

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Person responsible for updating data

Contact

Name of organization / entity

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Amir Tabatabaee

Position

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Other areas of specialty/work

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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