

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

13 Jun 2026

### Comparison of the effect of CO2 laser versus cryotherapy on the treatment of plantar warts: a randomized clinical trial

#### Protocol summary

2019-05-11, 1398/02/21

##### Study aim

To compare the effect of CO2 laser versus cryotherapy on the treatment of plantar warts

##### Design

This is a randomized clinical trial, phase II, in which 66 eligible patients will be randomly assigned to the intervention and control groups

##### Settings and conduct

The eligible patients with plantar warts who will refer to Sina Hospital in Hamadan City during the study period will be enrolled in the trial and the right and left side of the patients will be randomly assigned to the intervention and control groups through the drawing of lots.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria: Age of 6 to 80 years; Bilateral plantar warts. Exclusion criteria: Pregnancy or breastfeeding; Immunodeficiency; Active skin disease; Coagulopathy.

##### Intervention groups

Intervention group: CO2 laser with a power of 10 to 30 W one or two pulse every two weeks for 2 months Control group: Cryotherapy using liquid nitrogen for 20 seconds once every two weeks for 2 months

##### Main outcome variables

Improvement of the lesion

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20120215009014N275**

Registration date: **2019-05-11, 1398/02/21**

Registration timing: **prospective**

Last update: **2019-05-11, 1398/02/21**

Update count: **0**

##### Registration date

##### Registrant information

###### Name

Jalal Poorolajal

###### Name of organization / entity

Department of Epidemiology & Biostatistics Hamadan University of Medical Sciences

###### Country

Iran (Islamic Republic of)

###### Phone

+98 81 1838 0090

###### Email address

poorolajal@umsha.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2019-08-23, 1398/06/01

##### Expected recruitment end date

2020-11-21, 1399/09/01

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

##### Trial completion date

empty

##### Scientific title

Comparison of the effect of CO2 laser versus cryotherapy on the treatment of plantar warts: a randomized clinical trial

##### Public title

Comparison of the effect of CO2 laser versus cryotherapy on the treatment of plantar warts

##### Purpose

Treatment

##### Inclusion/Exclusion criteria

**Inclusion criteria:**

Age of 6 to 80 years Bilateral plantar warts

**Exclusion criteria:**

Pregnancy or breastfeeding Immunodeficiency Active skin disease Coagulopathy

**Age**

From **6 years** old to **80 years** old

**Gender**

Both

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **66**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

Random assignment of the right and left sides of the patients to the intervention and control groups through the drawing of lots. To do this, we prepare two sheets and write "intervention" on one sheet and "control" on another. Then, by referring each patient, one of the sheets will be randomly taken and the right side of the patient will be assigned to the intervention and the other side to the control group.

**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 Hamadan University of Medical Sciences

**Street address**

Vice-chancellor for Research and Technology,  
Hamadan University of Medical Sciences, Shahid Fahmideh Ave

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Approval date**

2019-04-27, 1398/02/07

**Ethics committee reference number**

IR.UMSHA.REC.1398.009

**Health conditions studied**

**1**

**Description of health condition studied**

Plantar warts

**ICD-10 code**

B07

**ICD-10 code description**

Viral warts

**Primary outcomes**

**1**

**Description**

Assessing the improvement of the lesion

**Timepoint**

2 months after the intervention

**Method of measurement**

By physical examination

**Secondary outcomes**

empty

**Intervention groups**

**1**

**Description**

Intervention group: CO2 laser with a power of 10 to 30 W one or two pulse every two weeks for 2 months

**Category**

Treatment - Other

**2**

**Description**

Control group: Cryotherapy using liquid nitrogen for 20 seconds once every two weeks for 2 months

**Category**

Treatment - Other

**Recruitment centers**

**1**

**Recruitment center**

**Name of recruitment center**

Sina Hospital in Hamadan City

**Full name of responsible person**

Dr Faeze Mohammadi

**Street address**

Sina Hospital, Mirzadeh Eshghi Ave.

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Phone**

+98 81 3827 4184

**Email**

faeze.m2991@yahoo.com

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Dr Saeid Bashirian

**Street address**

Hamadan University of Medical Sciences, Shahid Fahmideh Ave

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Phone**

+98 81 3838 0717

**Email**

info.research@umsha.ac.ir

**Grant name**

**Grant code / Reference number**

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

Yes

**Title of funding source**

Hamedan University of Medical Sciences

**Proportion provided by this source**

100

**Public or private sector**

Public

**Domestic or foreign origin**

Domestic

**Category of foreign source of funding**

*empty*

**Country of origin**

**Type of organization providing the funding**

Academic

## Person responsible for general inquiries

#### Contact

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Dr Faeze Mohammadi

**Position**

Resident of Dermatology

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Dermatology

**Street address**

Sina Hospital, Mirzadeh Eshghi Ave.

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Phone**

+98 81 3827 4184

**Email**

faeze.m2991@yahoo.com

## Person responsible for scientific inquiries

#### Contact

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Dr. Mohammad Reza Sobhan

**Position**

Dermatologist

**Latest degree**

Medical doctor

**Other areas of specialty/work**

Dermatology

**Street address**

Sina Hospital, Mirzadeh Eshghi Ave.

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Phone**

+98 81 3827 4184

**Email**

mrza\_sobhan@yahoo.com

## Person responsible for updating data

#### Contact

**Name of organization / entity**

Hamedan University of Medical Sciences

**Full name of responsible person**

Dr Jalal Poorolajal

**Position**

Professor of Epidemiology

**Latest degree**

Ph.D.

**Other areas of specialty/work**

Epidemiology

**Street address**

School of Public Health, Hamadan University of Medical Sciences, Shahid Fahmideh Ave

**City**

Hamadan

**Province**

Hamadan

**Postal code**

6517838695

**Phone**

+98 81 3838 0090

**Email**

poorolajal@umsha.ac.ir

## **Sharing plan**

### **Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

### **Study Protocol**

Undecided - It is not yet known if there will be a plan to make this available

### **Statistical Analysis Plan**

Undecided - It is not yet known if there will be a plan to make this available

## **Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

### **Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

### **Analytic Code**

Undecided - It is not yet known if there will be a plan to make this available

### **Data Dictionary**

Undecided - It is not yet known if there will be a plan to make this available