

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

A comparative study to investigate the effect of Pulsed Ultrasound and erythromycin phonophoresis in patients with Chronic Sinusitis

Protocol summary

Summary

The aim of this double blind clinical study is to compare the effect of pulsed ultrasound and erythromycin phonophoresis in patients with chronic maxillary and frontal sinusitis. In this study, 30 patients will randomly allocated to either pulsed ultrasound or phonophoresis groups. Treatment protocol for pulsed ultrasound group: Treatment duration: 5 min for each maxillary sinus, and 4 min for each frontal sinuses; Frequency: 1 MHz; Intensity: 1 W/Cm² for maxillary sinuses and 0.5 W/Cm² for frontal sinuses; Ultrasound type: Pulsed (ratio: 1:5). Patients in the phonophoresis group will receive erythromycin phonophoresis with the same pulsed ultrasound parameters. Treatment sessions: 10 sessions, 3 days per week, every other day. The primary outcome measure is percentage improvement in symptoms.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201203273259N2**

Registration date: **2012-03-28, 1391/01/09**

Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2012-03-28, 1391/01/09

Registrant information

Name

Noureddin Nakhostin Ansari

Name of organization / entity

Tehran University of Medical Sciences, Faculty of Rehabilitation

Country

Iran (Islamic Republic of)

Phone

+98 21 7753 3939

Email address

nakhostin@sina.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Research deputy, Tehran University of Medical Sciences

Expected recruitment start date

2010-07-23, 1389/05/01

Expected recruitment end date

2012-04-20, 1391/02/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A comparative study to investigate the effect of Pulsed Ultrasound and erythromycin phonophoresis in patients with Chronic Sinusitis

Public title

A comparative study to investigate the effect of Pulsed Ultrasound and erythromycin phonophoresis in patients with Chronic Sinusitis

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 1) continuous symptoms for at least 3 months 2) unsuccessful medical or surgery treatments
Exclusion criteria: 1) the presence of tumor in the head and face 2) contraindications for ultrasound therapy

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: 30

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research dputy, Tehran University of Medical Sciences

Street address

Keshavarz BLV, Qods Ave

City

Tehran

Postal code

Approval date

2010-05-23, 1389/03/02

Ethics committee reference number

89-01-32-10200

Health conditions studied

1

Description of health condition studied

Chronic sinusitis

ICD-10 code

J32.0

ICD-10 code description

Chronic maxillary sinusitis

2

Description of health condition studied

Chronic sinusitis

ICD-10 code

J32.1

ICD-10 code description

Chronic frontal sinusitis

Primary outcomes

1

Description

Percent improvement

Timepoint

pretest-posttest

Method of measurement

Change in symptom score divided by pre score multiplied by 100

Secondary outcomes

empty

Intervention groups

1

Description

Treatment protocol for pulsed ultrasound group:
Treatment duration: 5 min for each maxillary sinus, and 4 min for each frontal sinuses; Frequency: 1 MHz; Intensity: 1 W/Cm2 for maxillary sinuses and 0.5 W/Cm2 for frontal sinuses; Ultrasound type: Pulsed (ratio: 1:5).

Category

Rehabilitation

2

Description

Treatment protocol for phonophoresis group:
Phonophoresis of erythromycin; Duration: 5 minutes for each maxillary sinuses and 4 minutes for each frontal sinuses; Frequency 1MHz; Intensity: 1 Watt/cm2 for maxillary sinus and 0.5 Watt/cm2 for frontal sinus; Ultrasound type: pulsed (1:5).

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

School of Rehabilitation , Tehran University of Medical Sciences

Full name of responsible person

Dr. Nouredin Nakhostin Ansari

Street address

Enghelab Ave, Pitch-e-shemiran

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research deputy, Tehran University of Medical Sciences

Full name of responsible person

Dr. Fotouhi

Street address

Qods Ave, Keshavarz BLV

City

Tehran

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Research deputy, Tehran 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

School of Rehabilitation, Tehran University of Medical Sciences

Full name of responsible person

Dr. Nouredin Nakhostin Ansari

Position

PhD, PT/ Associate Professor

Other areas of specialty/work

Street address

Enghelab Ave, Pitch-e-shemiran

City

Tehran

Postal code

11489

Phone

+98 21 7753 3939

Fax

+98 21 7772 7009

Email

nakhostin@sina.tums.ac.ir

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

School of Rehabilitation, Tehran University of Medical Sciences

Full name of responsible person

Dr. Nouredin Nakhostin Ansari

Position

PhD, PT/ Associate professor

Other areas of specialty/work

Street address

Enghelab Ave. Pitch-e-shemiran

City

Tehran

Postal code

11489

Phone

+98 21 7753 3939

Fax

+98 21 7772 7009

Email

nakhostin@sina.tums.ac.ir

Web page address

Person responsible for updating data

Contact

Name of organization / entity

School of Rehabilitation, Tehran University of Medical Sciences

Full name of responsible person

Dr. Nouredin Nakhostin Ansari

Position

PhD, PT/Associate professor

Other areas of specialty/work

Street address

Enghelab Ave, Pitch-e-shemiran

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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