Clinical Trial Protocol
Iranian Registry of Clinical Trials

04 Nov 2026

Evaluation the anti-inflammatory effects of curcumin in the treatment of patients with COVID-19

Protocol summary

Study aim
Evaluation of anti-inflammatory effect of curcumin in the treatment of patients with COVID-19

Design
a non-randomized open label, parallel group clinical trial on 60 patients With covid-19 (30 patients in the treatment group and 30 patients in the control group)

Settings and conduct
60 COVID-19 infected patients in Razi Hospital, Ahvaz, at the same time as receiving the national treatment protocol for CoVID-19 treatment, are categorized in two groups receiving nano-curcumin capsules (three 80 mg capsules per day) for one week and control. Before and after the intervention (days 0 and 7), blood samples were collected from patients in both groups and the gene expression of TNF-a, IL-1, IL-6 and IFN-G inflammatory cytokines assesed using real-time RT-PCR as well as serum concentrations of inflammatory cytokines TNF-a, IL-1 and IL-6 are measured using ELISA technique. Also, demographic characteristics, clinical symptoms and laboratory findings of patients are collected through checklists.

Participants/Inclusion and exclusion criteria
1- Confirmed COVID-19 infection 2- Conscious consent to participate in the study

Intervention groups
- Treatment group: Three nno-curcumin capsules 80 mg three times a day for 1 week (7 days) - Control group: no intervention

Main outcome variables
cytokines gene expression, cytokines serum levels, clinical symptoms, laboratory findings

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20200519047510N1**
Registration date: **2020-05-28, 1399/03/08**
Registration timing: **prospective**

Last update: **2020-05-28, 1399/03/08**
Update count: **0**

Registration date
2020-05-28, 1399/03/08

Registrant information

Name
Ali Asadirad

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 61 3332 2316

Email address
ali.asadirad@sbmu.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-06-05, 1399/03/16

Expected recruitment end date
2020-06-21, 1399/04/01

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Evaluation the anti-inflammatory effects of curcumin in the treatment of patients with COVID-19

Public title
Evaluation the anti-inflammatory effects of curcumin in the treatment of patients with COVID-19

Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Confirmed COVID-19 infection Conscious consent to participate in the study
Exclusion criteria:
Pregnancy and lactation Long-term use of immunosuppressive drugs Use of nutritional supplements Dissatisfaction to participate in the study
Age
From **18 years** old to **65 years** old
Gender
Both

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **60**
Randomization (investigator's opinion)
Not 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
Ethics Committee of Ahvaz Jundishapur University of Medical Sciences
Street address
Esfand Ave., Golestan
City
Ahvaz
Province
Khouzestan
Postal code
6135715794
Approval date
2020-05-17, 1399/02/28
Ethics committee reference number
IR.AJUMS.REC.1399.176

Health conditions studied

1

Description of health condition studied
COVID-19
ICD-10 code
U07.1
ICD-10 code description
Corona virus infection, unspecified

Primary outcomes

1

Description
Gene expression of inflammatory cytokines in peripheral blood mono-nuclear cells of patients receiving nanocurcumin and the control group
Timepoint
Before and after the intervention (0 and 7 days)
Method of measurement
real time-PCR

2

Description
Serum levels of inflammatory cytokines of patients receiving nanocurcumin and the control group
Timepoint
Before and after the intervention (0 and 7 days)
Method of measurement
ELISA technique

3

Description
Clinical symptoms of patients receiving nanocurcumin and the control group
Timepoint
Before and after the intervention (0 and 7 days)
Method of measurement
Examination by a specialist

4

Description
Laboratory findings of patients receiving nanocurcumin and the control group
Timepoint
Before and after the intervention (0 and 7 days)
Method of measurement
Laboratory findings in the Patient file

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: receiving 3 nanocurcumin 80 mg capsules (240 mg) for 7 days at the same time with

common therapeutic protocol

Category

Treatment - Drugs

2

Description

Control group: received common therapeutic protocols and not nanocurcumin

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Razi Hospital, Ahvaz

Full name of responsible person

Roohangiz Nashibi

Street address

No. 35,. Western 7 Ave., Kian Abad

City

Ahvaz

Province

Khouzestan

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6155716348

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Email

roohangizenashibi@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Ahvaz University of Medical Sciences

Full name of responsible person

Mohammad Badavi

Street address

Main building, Ahvaz University of Medical Science, Golestan

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6135539345

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Badavi-m@ajums.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Ahvaz 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

Ahvaz University of Medical Sciences

Full name of responsible person

Ali Asadirad

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Immunology

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Person responsible for scientific inquiries

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Person responsible for updating data

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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