Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Evaluation of the efficacy of eucalyptus essence inhalation in hospitalized patients with COVID-19: a clinical trial study

Protocol summary

Study aim
Comparison of the effectiveness of eucalyptus essence inhalation in the intervention and control groups in hospitalized patients with COVID-19

Design
A randomized controlled clinical trial, phase 3 on 40 patients, a random sequence is created by an epidemiologist by running an online program on the website (https://www.sealedenvelope.com), due to the use of codes The specialization created by the website also guarantees the allocation hiding

Settings and conduct
Study place: General ward of Kamkar Martyrs Hospital in Qom; Study population: hospitalized patients with COVID-19 ; Type of blinding: In this study blinding was not performed

Participants/Inclusion and exclusion criteria
Inclusion criteria: patients with COVID-19; Ability to participate in the study; Age between 18 and 70; Lung tissue involvement according to CT scan; Signing informed consent form. Non-inclusion criteria: use of drugs affecting airway obstruction such as salbutamol spray; Pregnancy and lactation; Previous medical history; Cardiopulmonary disease; Blood pressure above 160 mm Hg; Sensitivity to medicinal plants

Intervention groups
Intervention group: Patients with COVID-19 who in addition to receiving routine hospital care will receive eucalyptus essence every 12 hours for 5 days with a nebulizer mask. Control group: Patients with COVID-19 who receive only routine hospital care

Main outcome variables
respiratory rate; blood pressure; heart rate ;Number of coughs; white blood cells (WBC); Arterial blood saturation; Fever

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20201127049507N1**
Registration date: **2021-08-22, 1400/05/31**
Registration timing: **prospective**

Last update: **2021-08-22, 1400/05/31**
Update count: **0**

Registration date
2021-08-22, 1400/05/31

Registrant information

Name
Iman Khahan-Yazdi

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 25 3661 7321

Email address
antenen@yahoo.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-09-01, 1400/06/10

Expected recruitment end date
2022-09-01, 1401/06/10

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Evaluation of the efficacy of eucalyptus essence inhalation in hospitalized patients with COVID-19: a clinical trial study

Public title
The efficacy of eucalyptus essence inhalation in hospitalized patients with COVID-19
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
People with a diagnosis of COVID -19 and hospitalization in general wards Having the necessary ability to conduct studies Involvement of lung tissue according to CT scan In both sexes men and women in the age group of 18 to 70 years who have recently been admitted Have signed the informed consent form to participate in the study They do not participate in another clinical trial at the same time
Exclusion criteria:
History of previous illness Pregnancy and lactation Serious heart and lung disease Blood pressure above 160 mm Hg history of allergic symptoms Consumption of herbal perfumes as well as synthetic sprays effective on airway obstruction
Age
From **18 years** old to **70 years** old
Gender
Both

Phase
3
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
patients will be allocated into two groups using apermuted balanced block randomization method with the size of blocks 4 and 6 . random sequence will be generated by an epidemiologist by running an online program in sealed envelope website(https://www.sealedenvelope.com) . concealment is also guaranteed due to the use of specific codes that are obtained by the website
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 Qom University of Medical Sciences
Street address
Qom University of Medical Sciences; Qadir Blvd.
City
Qom
Province
Ghoum
Postal code
3713649373
Approval date
2021-03-13, 1399/12/23
Ethics committee reference number
IR.MUQ.REC.1400.003

Health conditions studied

1

Description of health condition studied
COVID -19 disease
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Arterial oxygen saturation
Timepoint
Every 24 hours
Method of measurement
With pulse oximetry device

2

Description
respiratory rate
Timepoint
every 24 hours
Method of measurement
By monitoring device

3

Description
blood pressure
Timepoint
every 24 hours
Method of measurement
By monitoring device

4

Description
heart rate
Timepoint
every 24 hours
Method of measurement
By monitoring device

5

Description
white blood cells
Timepoint
every 24 hours
Method of measurement
Perform a complete blood count test

6

Description
fever
Timepoint
every 24 hours
Method of measurement
By thermometer device

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The intervention group will receive routine ward care as well as 2cc essence of Eucalyptus, that will be prepared in the Jihad Agricultural Unit of University of Tehran, after being diluted with 3cc of distilled water to a concentration of 0.125%, delivered via a nebulizer mask, every 12 hours per day for a duration of 10 minutes, that is,10 times in 5 days at times, not coinciding with the time of other medications. Arterial blood saturation and all other parameters will be measured and recorded, before and after the intervention, by monitoring device, pulse oximetry and thermometer. Relevant blood investigations carried out during routine hospital workup, will also be recorded from the patient’s file.
Category
Treatment - Drugs

2

Description
Control group: Receive routine hospital care and do not receive extra intervention
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Kamkar Hospital
Full name of responsible person
Dr. Javad Khodadadi
Street address
19 Dey street
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3713649373
Phone
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Email
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Ghoum University of Medical Sciences
Full name of responsible person
Dr. Mohammad Reza Qadir
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Shahid Lavasani St
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mail@muq.ac.ir
Web page address
https://muq.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Ghoum 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
Ghoum University of Medical Sciences
Full name of responsible person
Iman Khahan Yazdi
Position
student

Latest degree
A Level or less
Other areas of specialty/work
Nursery
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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