Clinical Trial Protocol
Iranian Registry of Clinical Trials

13 Nov 2026

Evaluation of effect of Hemoperfusion in patients with COVID-19 in Hajar hospital, shahrekord

Protocol summary

Study aim
Determining the effectiveness of hemoperfusion in patients with COVID-19 disease in Hajar Hospital in Shahrekord

Design
Patients undergo hemoperfusion. Clinical signs and CT scans of the lungs are recorded continuously before and after hemoperfusion. And improvement of clinical findings and CT findings of the patient are evaluated. Each patient may need at least three hemoperfusions. Each perfusion period lasts about 4 hours.

Settings and conduct
ICU ward of Hajar Hospital in Shahrekord Patients undergo hemoperfusion. Clinical signs and CT scans of the lungs are recorded continuously before and after hemoperfusion. And improvement of clinical findings and CT findings of the patient are evaluated. Each patient may need at least three hemoperfusions. Each perfusion period lasts about 4 hours.

Participants/Inclusion and exclusion criteria
Patients with severe progressive pulmonary involvement Have a positive PCR test Patients who are currently under mechanical ventilation or will need it in the near future.

Intervention groups
Patients with COVID-19 undergo hemoperfusion.

Main outcome variables
Mortality rate, reduction of hospitalization days, CT scan indices

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20210718051922N1**
Registration date: **2021-08-06, 1400/05/15**
Registration timing: **registered_while_recruiting**
Last update: **2021-08-06, 1400/05/15**
Update count: **0**

Registration date
2021-08-06, 1400/05/15

Registrant information

Name
Ahmad Raesi

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 38 3222 0016

Email address
raesi.a@skums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2021-07-27, 1400/05/05

Expected recruitment end date
2021-10-27, 1400/08/05

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Evaluation of effect of Hemoperfusion in patients with COVID-19 in Hajar hospital, shahrekord

Public title
Hemoperfusion in Covid 19

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Patients with severe progressive pulmonary involvement

Have a positive PCR test Patients who are currently under mechanical ventilation or will need it in the near future.

Exclusion criteria:

Patients with shock symptoms Patients with multiple organ failure

Age

From **18 years** old

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics Committee of Shahrekord University of Medical Sciences

Street address

Parastar Aven.Hajar Hospital

City

Shahrekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8816754633

Approval date

2020-04-19, 1399/01/31

Ethics committee reference number

IR.SKUMS.REC.1399.030

Health conditions studied

1

Description of health condition studied

COVID19

ICD-10 code

B34.2

ICD-10 code description

Coronavirus infection, unspecified

Primary outcomes

1

Description

Mortality

Timepoint

End of study

Method of measurement

Patient file

2

Description

Number of hospitalization days

Timepoint

End of study

Method of measurement

Patient file

3

Description

CT scan indexes

Timepoint

Before the start of the study and the first day after hemoperfusion

Method of measurement

CT scan of the patient

Secondary outcomes

1

Description

Temperature

Timepoint

Days 1, 3, 7 and 12

Method of measurement

Thermometer

2

Description

O2 sat

Timepoint

Days 1, 3, 7 and 12

Method of measurement

Pulse oximetry

3

Description

WBC

Timepoint

Days 1, 3, 7 and 12

Method of measurement

Blood test

4

Description
Lym
Timepoint
Days 1, 3, 7 and 12
Method of measurement
Blood test

5

Description
Ferritin
Timepoint
Days 1, 3, 7 and 12
Method of measurement
Blood test

6

Description
Ast, Alt , Alkp
Timepoint
Days 1, 3, 7 and 12
Method of measurement
Blood test

7

Description
Mechanical ventilation
Timepoint
Before the intervention and the first dose after hemoperfusion
Method of measurement
Patient prognosis

Intervention groups

1

Description
Intervention group: Patients with COVID-19 undergo hemoperfusion.
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Hajar Hospital, Shahrekord
Full name of responsible person
Ahmad Raesi
Street address
Parastar Aven
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Chahar-Mahal-va-Bakhtiari
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahre-kord University of Medical Sciences
Full name of responsible person
Mehraban Sadeghy
Street address
Parastar Aven
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahre-kord 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
Shahre-kord University of Medical Sciences
Full name of responsible person
Ahmad Raesi
Position
Internal specialist
Latest degree
Specialist
Other areas of specialty/work
Internal Medicine
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Parastar aven
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is 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
No - There is not a plan to make this available
Informed Consent Form
No - There is not 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
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available
Title and more details about the data/document
Only part of the data such as information about the main outcome or the like can be shared.
When the data will become available and for how long
2022-2023
To whom data/document is available
The data will be available only to researchers working in academic and scientific institutions
Under which criteria data/document could be used
I have not decided yet
From where data/document is obtainable
I have not decided yet
What processes are involved for a request to access data/document
I have not decided yet
Comments