Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Sep 2026

Comparison of the Efficacy of Intranasal Mupirocin Ointment with Povidone Iodine Solution on the Colonization of Staphylococcus aureus among Carrier Patients and Medical Staff

Protocol summary

Study aim

Comparison of the efficacy of intranasal mupirocin ointment with povidone iodine solution on the colonization of Staphylococcus aureus among carrier patients and medical staff

Design

Randomized, open-label clinical trial, with two parallel arms (allocation ratio 1:1).

Settings and conduct

This study will performe on patients undergoing hemodialysis and medical staff (carriers of Staphylococcus aureus in the nasal cavity) in Labbafinejad Hospital (Tehran) in 2022. Eligible patients are allocated to two groups using a random number table. Initially, all patients underwent baseline culture of the nasal cavity for Staphylococcus aureus. Group A recieves mupirocin ointment (topically in the nasal cavity twice a day) for five days. Group B recieves Povidone Iodine solution (topically in the nasal cavity twice daily) for five days. Then, nasal swab specimens are taken from all individuals and examined for colonization of Staphylococcus aureus. Finally, a change in the colonization of Staphylococcus aureus is reported in participants.

Participants/Inclusion and exclusion criteria

Inclusion criteria are: Patients undergoing hemodialysis in the dialysis ward of the hospital; or staff working in the hemodialysis, intensive care, operating room and infectious wards of the hospital, and positive culture of nasal specimens for Staphylococcus aureus. Exclusion criteria are: Immunocompromised patients, antibiotic consumption in the last 1 month, history of Hypersensitivity to intranasal mupirocin ointment or povidone iodine solution, and corticosteroids consumption.

Intervention groups

Group A receives mupirocin ointment (topically in the nasal cavity twice daily) for five days. Group B receives povidone iodine solution (topically in the nasal cavity twice daily) for five days.

Main outcome variables

Colonization of Staphylococcus aureus in the nasal cavity

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20170417033487N2**
Registration date: **2022-05-13, 1401/02/23**
Registration timing: **prospective**

Last update: **2022-05-13, 1401/02/23**
Update count: **0**

Registration date

2022-05-13, 1401/02/23

Registrant information

Name

sara abilghasemi

Name of organization / entity

Shahid Beheshti university of Medical Scinces

Country

Iran (Islamic Republic of)

Phone

+98 911 354 8867

Email address

saraabolghasemi@sbmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2022-06-22, 1401/04/01

Expected recruitment end date

2022-09-22, 1401/06/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Efficacy of Intranasal Mupirocin Ointment with Povidone Iodine Solution on the Colonization of Staphylococcus aureus among Carrier Patients and Medical Staff

Public title

Comparison of the efficacy of intranasal mupirocin ointment with povidone iodine solution on the colonization of Staphylococcus aureus

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Patients undergoing hemodialysis in the dialysis ward of the hospital; or staff working in the hemodialysis, intensive care, operating room and infectious wards of the hospital Positive culture of nasal specimens for Staphylococcus aureus

Exclusion criteria:

Immunocompromised patients Antibiotic consumption in the last 1 month History of Hypersensitivity to intranasal mupirocin ointment or povidone iodine solution Corticosteroids consumption

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **54**

Randomization (investigator's opinion)

Randomized

Randomization description

The randomization method is a simple randomization that is done in the form of individual random units. The tool used to do this is a random numbers table. The method of constructing a random sequence is that first the researcher selects one of the numbers with his eyes closed and then moves in the right direction. Odd numbers are considered for intervention and even numbers are for control. Random concealment is also performed using sequentially numbered sealed opaque envelopes (SNOSE).

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 committees of School of Medicine - Shahid Beheshti University of Medical Sciences

Street address

School of medicine of Shahid Beheshti University of medical sciences, Koodakyar Ave., Daneshjoo Blvd,. Yaman St,. Chamran highway.

City

Tehran

Province

Tehran

Postal code

1985717443

Approval date

2022-04-12, 1401/01/23

Ethics committee reference number

IR.SBMU.MSP.REC.1401.025

Health conditions studied

1

Description of health condition studied

Staphylococcus aureus carriers in the nasal cavity

ICD-10 code

B95.6

ICD-10 code description

Staphylococcus aureus as the cause of diseases classified to other chapters

Primary outcomes

1

Description

Colonization of Staphylococcus aureus in the nasal cavity

Timepoint

Sixth day after the start of the intervention

Method of measurement

Laboratory report (culture in trypticase soy broth)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Group A receives mupirocin ointment

(topically in the nasal cavity twice daily) for five days.

Category

Treatment - Drugs

2

Description

Intervention group: Group B receives povidone iodine solution (topically in the nasal cavity twice daily) for five days.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Labbafinejad hospital

Full name of responsible person

Dr. Sara Abolghasemi

Street address

9th Boostan St., Pasdaran, Tehran

City

Tehran

Province

Tehran

Postal code

1666663111

Phone

+98 21 2360 2280

Email

saraabolghasemi@sbmu.ac.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr. Afshin Zarghi

Street address

Shahid Beheshti University of Medical Sciences, No. 2, Arabi St., Yemen St., Chamran Highway, Tehran, Iran

City

Tehran

Province

Tehran

Postal code

1983969411

Phone

+98 21 2243 9780

Email

Mpajouhesh@sbmu.ac.ir

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahid Beheshti 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

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr. Sara Abolghasemi

Position

Assistant professor

Latest degree

Medical doctor

Other areas of specialty/work

Infectious diseases

Street address

9th Boostan St., Pasdaran, Tehran

City

Tehran

Province

Tehran

Postal code

1666663111

Phone

+98 21 2360 2280

Email

saraabolghasemi@sbmu.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Dr. Sara Abolghasemi

Position

Assistant professor

Latest degree

Medical doctor

Other areas of specialty/work

Infectious diseases

Street address

9th Boostan St., Pasdaran, Tehran

City

Tehran

Province

Tehran

Postal code

1666663111

Phone
+98 21 2360 2280
Email
saraabolghasemi@sbmu.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Dr. Sara Abolghasemi
Position
Assistant professor
Latest degree
Medical doctor
Other areas of specialty/work
Infectious diseases
Street address
9th Boostan St., Pasdaran, Tehran
City
Tehran
Province
Tehran
Postal code
1666663111
Phone
+98 21 2360 2280
Email
saraabolghasemi@sbmu.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