Aloe vera gel versus olive oil for the prevention of pressure ulcers among bedridden patients

Submission date	Recruitment status No longer recruiting	Prospectively registered	
16/07/2023		[X] Protocol	
Registration date	Overall study status Completed	[] Statistical analysis plan	
07/08/2023		[X] Results	
Last Edited	Condition category Skin and Connective Tissue Diseases	Individual participant data	
08/03/2024			

Plain English summary of protocol

Background and study aims

This study aimed to compare the effects of aloe vera gel and olive oil in preventing pressure ulcers among bedridden individuals admitted in orthopaedic wards. Pressure ulcers are a prevalent issue in hospitals, leading to increased nursing care needs. Prior research suggests that aloe vera gel and olive oil can treat pressure ulcers by reducing bacterial presence and preserving skin integrity, making them potential preventive options.

Who can participate?

Patients aged 18 years or older admitted in the Orthopedics wards of selected hospitals who are at risk of pressure ulcers.

What does the study involve?

The study included two experimental groups and one control group in June 2022 to Feb 2023. The first experimental group received aloe vera gel, the second received olive oil, and the control group received routine skin care. The effectiveness of both treatments in preventing pressure ulcers was evaluated.

The assessment of pressure-prone areas was conducted over 11 days using the EPUAP and Braden scales.

What are the possible benefits and risks of participating?

Benefits include contributing to scientific knowledge, potential access to preventive treatments, medical monitoring, and potential skin health improvement. The study's findings may also improve patient care in the future. However, there are risks, such as adverse reactions to the substances, no guaranteed benefit, time commitment, discomfort, potential privacy concerns, and ethical considerations. Before joining, participants receive detailed information about the study, its objectives, potential risks, and benefits. Participation is voluntary and individuals can withdraw at any time without repercussions.

Where is the study run from? Desh Bhagat University (India) When is the study starting and how long is it expected to run for? February 2021 to February 2023

Who is funding the study? Investigator initiated and funded

Who is the main contact? Rajni Thapa, rajnithapa83@gmail.com

Contact information

Type(s) Principal Investigator

Contact name Ms Rajni Thapa

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Contact details

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers Nil known

Study information

Scientific Title

Effect of aloe vera gel versus olive oil for the prevention of pressure ulcers among bedridden patients

Study objectives

Aloe vera gel reduces the incidence of pressure ulcers. Olive oil reduces the incidence of pressure ulcers.

Ethics approval required

Ethics approval required

Ethics approval(s)

1. Approved 23/06/2021, Ethical Committee Desh Bhagat University (Desh Bhagat University Punjab and GMC JAMMU, Jammu, 180003, India; +91 (0)9855007125; research@deshbhagatuniversity.in), ref: DBU/RC/872

2. Approved 04/06/2022, EC-GMC Jammu (Govt.Medical College & Hospital, Jammu, 180003, India; +91 (0)191-2584290, 91, 92 (Exchange); +91 (0)191-2582355, 56/ 2585444 (Control Room). +91 (0)191-2584234 ; pmc-gmcjammu@jk.gov.in), ref: GMC/2022/PhD/952

Study design

Interventional non-randomized clinical trial

Primary study design Interventional

Secondary study design Non randomised study

Study setting(s) Hospital, University/medical school/dental school

Study type(s) Prevention

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet.

Health condition(s) or problem(s) studied

Prevention of pressure ulcers among bed ridden patients admitted in orthopaedic ward

Interventions

A quasi-experimental study including two experimental and one control group aimed at preventing pressure ulcers. Aloe vera gel was applied to experimental group 1st and olive oil was applied topically to experimental group 2 while the control group received routine skin care. All three groups evaluated the effect of aloe vera gel and olive oil in the prevention of pressure ulcers. The assessment of the pressure-prone areas was performed over the course of 11 days using the Modified EPUAP (European Pressure Ulcer Advisory Panel) scale and the Braden Pressure Ulcer Risk Assessment scale.

Intervention Type

Other

Primary outcome measure

 Braden pressure ulcer risk reduction score as measured by the Braden Pressure ulcer risk assessment scale at 1st day pre-assessment and 1st day post-assessment
Incidence of pressure ulcers measured using the modified European Pressure Ulcer Advisory Panel (EPUAP) assessment scale assessed on the 11th day

Secondary outcome measures

Grade/type and location/site of pressure ulcer measured using the modified European Pressure Ulcer Advisory Panel (EPUAP) assessment scale assessed on the 11th day

Overall study start date

02/02/2021

Completion date

10/02/2023

Eligibility

Key inclusion criteria

1. Subjects admitted in the Orthopedics wards of selected hospitals.

2. Subjects within the 48 hours of hospitalization in the orthopaedics wards with no pressure ulcers.

3. Having moderate to high risk (9-14) Braden pressure ulcer score (NPUAP).

4. Subjects willing to participate.

5. Subjects insensitivity to topical Aloe Vera gel and Olive oil.

6. Subjects aged over 18 years.

Participant type(s)

Patient

Age group

Adult

Lower age limit 18 Years

Upper age limit 80 Years

Sex Both

Target number of participants 232

Total final enrolment 210

Key exclusion criteria

- 1. Subjects who were discharge in between the data collection phase.
- 2. Having Mild Braden Pressure ulcer risks.
- 3. Reluctance to continue cooperation

Date of first enrolment 20/06/2022

Date of final enrolment 31/01/2023

Locations

Countries of recruitment India

Study participating centre Government Medical College and Hospital Maheshpura Chowk Bakshi Nagar Jammu India 180003

Sponsor information

Organisation Desh Bhagat University

Sponsor details Mandi Gobindgarh Katra India 187203 +91 (0)9855007125 research@deshbhagatuniversity.in

Sponsor type University/education

Website http://www.deshbhagatuniversity.in/

ROR https://ror.org/007n0ss86

Funder(s)

Funder type Other

Funder Name Investigator initiated and funded

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal

Intention to publish date

01/06/2024

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request Rajni Thapa, rajnithapa83@gmail.com

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol file</u>			21/07/2023	No	No
<u>Basic results</u>			08/03/2024	No	No