

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

<b>Submission date</b> 16/07/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 07/08/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 08/03/2024	<b>Condition category</b> Skin and Connective Tissue Diseases	<input type="checkbox"/> Individual participant data

## 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

### ORCID ID

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### Contact details

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## Additional identifiers

### Clinical Trials Information System (CTIS)

Nil known

### Protocol serial number

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

### **Study type(s)**

Prevention

### **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(s)**

1. 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
2. Incidence of pressure ulcers measured using the modified European Pressure Ulcer Advisory Panel (EPUAP) assessment scale assessed on the 11th day

### **Key secondary outcome(s)**

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

### **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

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Upper age limit**

80 years

**Sex**

All

**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

### ROR

<https://ror.org/007n0ss86>

## Funder(s)

### Funder type

Other

### Funder Name

Investigator initiated and funded

## Results and Publications

### 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](mailto:rajnithapa83@gmail.com)

### IPD sharing plan summary

Available on request

### Study outputs

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