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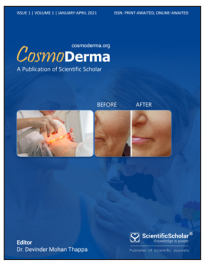

*Innovations*

# Use of ultrasound jelly instead of normal saline during radiosurgery

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Received: 19 April 2024
Accepted: 22 May 2024
Published: 13 June 2024

**DOI**
10.25259/CSDM_51_2024

**Video is available on:**
https://doi.org/10.25259/
CSDM_51_2024

**Quick Response Code:**

## PROBLEM

While doing radiosurgery, we have to apply normal saline to keep the skin tissue moist. Normal saline gets dried within 5 – 10 s, so we have to reapply it frequently if the radiosurgical procedure is long. If the lesions become dry, we are not able to cut or coagulate the lesion. This also requires the help of an assistant to constantly keep the lesion moist so as to perform the radiosurgical procedure.

## SOLUTION

Ultrasound jelly is a good option to use instead of normal saline. Once applied, it keeps the skin tissue moist for almost 5 min. It is cheap, easily available, and mitigates the need for assistance during the procedure. Electrocardiogram jelly is another alternative.

Ultrasound jelly constitutes Carbopol 934, propylene glycol, methylparaben, triethanolamine, and blue dye 0.1%.[1] Adverse skin reactions with Doppler ultrasound gel are rare and related mostly to allergic contact dermatitis or contact urticaria [Video 1]. So far, 14 cases of contact dermatitis linked to ultrasonic gel have been reported in the published work.[2] The allergens involved are propylene glycol, imidazolidinyl urea, phenoxyethanol, triethanolamine, ethyl, methyl, butyl, and propyl parabens.

### Ethical approval

The Institutional Review Board approval is not required.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

### Financial support and sponsorship

Nil.

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### Conflicts of interest

There are no conflicts of interest.

### Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

## REFERENCES

1. Al-Nima AM, Al-Kotaji MY, Al-Iraqi OS, Ali ZH. Preparation and evaluation of ultrasound transmission gel. Asian J Pharm Clin Res 2019;12:422-7.
2. Chasset F, Soria A, Moguelet P, Mathian A, Auger Y, Francès C, *et al*. Contact dermatitis due to ultrasound gel: A case report and published work review. J Dermatol 2016;43:318-20.

**How to cite this article:** Deshmukh AR, Mahawar B. Use of ultrasound jelly instead of normal saline during radiosurgery. CosmoDerma. 2024;4:57. doi: 10.25259/CSDM_51_2024