

Innovations

A novel use of glass vial as a safe ampoule opener

Muhammed Mukhtar², Sofia Mukhtar²

¹Department of Dermatology, Mukhtar Skin Centre, Katihar, Bihar, ²Department of Pedodontics, Career Institute of Dental Sciences, Lucknow, Uttar Pradesh, India.

***Corresponding author:**

Muhammed Mukhtar,
Department of Dermatology,
Mukhtar Skin Centre, Katihar,
Medical College Road, Katihar,
Bihar, India.

drmmukhtar20@gmail.com

Received: 16 October 2022
Accepted: 15 December 2022
Epub Ahead of Print: 27 June 2023
Published:

DOI
[10.4103/JCAS.JCAS_195_22](https://doi.org/10.4103/JCAS.JCAS_195_22)

Videos available on:
<https://jcasonline.com/>

Quick Response Code:



Keywords: Ampoule, biopsy punch, contamination, dentistry, dermatosurgery, finger, glass particulate, injury, intralesional, opener

PROBLEM STATEMENT

In minor dermatologic surgery, dentistry for intralesional injection treatment, ampoules of local anesthetic agents, normal saline, distilled water, sodium bicarbonate solution, 5-Fluorouracil injection, and other substances are commonly used. However, if an appropriate tool is not used, fingers can get hurt while opening the ampoules. The ampoules have been opened using an ampoule opener and a syringe tube.^{1,2} A syringe tube, however, cannot be used to open all types of ampoules. Second, if the ampoule becomes crushed, the medicine should not be injected with that syringe tube. Third, because the tube is composed of plastic, if the ampoule head is

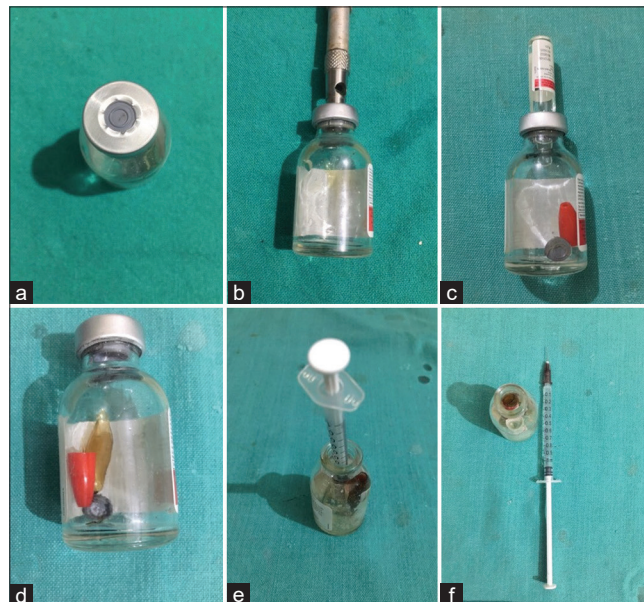


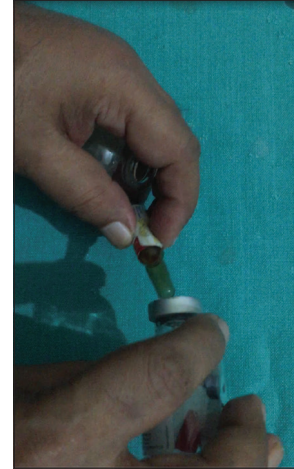
Figure 1: (a-f) a used vial of an antibiotic is procured for opening glass ampoules with safety.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2024 Published by Scientific Scholar on behalf of Journal of Cutaneous and Aesthetic Surgery



Video 1: Technique for using single vial for safe ampoule opening.



Video 2: Technique for using two vials for safe ampoule opening.

not correctly positioned in the tube, it may slip. Fourth, the ampoule opener is not readily available. An optimal-sized injectable antibiotic vial is used to minimize hand damage while opening an ampoule.

RECOMMENDED SOLUTION

A biopsy punch device is used to punch out the vial's rubber cap. Following that, the ampoule head is put into the vial cap and manually opened using fingers or another decapped vial [Videos 1 and 2]. The drug is then withdrawn from the ampoule into the syringe [Figure 1a-f]. Ampoule heads are gathered in the ampoule-opening vial. Thus, the utilized antibiotic vial is more adaptable, shock absorber due to the rubber cap, is an easily accessible opener for ampoules with safety, and reduces the possibility of dermatologists' and clinic assistants' hands being injured. Avoid aspirating the bottom part of the medication to avoid glass particle contamination.

Authors' contributions

Muhammed Mukhtar: Concepts, Design, Definition of intellectual content, Literature search, Manuscript

preparation, Manuscript Editing, and Manuscript review. Sofia Mukhtar: Concepts, Design, Definition of intellectual content, Literature search, Manuscript preparation, Manuscript Editing, and Manuscript review.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Delderfield AJ, Tarelli E. A device facilitating the opening of ampoules. *Anal Biochem* 1988;171:409-10.
2. Zhang W, Gu L, Zhang Y, Lu H. Syringe tube as ampoule opener: A safe, simple, and effective tool in dermatologic surgery. *J Am Acad Dermatol* 2022;86:e101-2.

How to cite this article: Mukhtar M, Mukhtar S. A novel use of glass vial as a safe ampoule opener. *J Cutan Aesthet Surg*. doi: 10.4103/JCAS.JCAS_195_22