

Innovations

An innovative disposable ring for mucosal examination and pressure hemostasis

Muhammed Mukhtar¹, Sofia Mukhtar²

¹Department of Dermatology, Mukhtar Skin Centre, Katihar, Bihar, ²Department of Pediatric and Preventive Dentistry, Career Post Graduate Institute of Dental Sciences, Lucknow, Uttar Pradesh, India.



***Corresponding author:**
Muhammed Mukhtar,
Department of Dermatology,
Mukhtar Skin Centre, Katihar,
Bihar, India.

drmmukhtar20@gmail.com

Received: 26 March 2025

Accepted: 14 April 2025

Published: 17 May 2025

DOI

10.25259/CSDM_61_2025

Video available online at
[https://doi.org/10.25259/
CSDM_61_2025](https://doi.org/10.25259/CSDM_61_2025)

Quick Response Code:



PROBLEM

Mucosal inspection of the oral cavity and genitalia is a difficult task. The available spatulas and tongue depressors are opaque, obstructing the field during mucosal surface examination. During small dermatosurgical procedures, the problem of local hemostasis is frequently encountered, for which plastic and steel rings with angulated handles are not widely available.^[1,2] Furthermore, a ring-shaped finger grip with scissors or forceps has been employed for pressure hemostasis, which is difficult to execute due to the instrument's straight handle.^[3] Instead of the metallic ring, we used a designed atraumatic disposable ring for clinical assessment and local pressure hemostasis.

SOLUTION

We suggest a customized disposable syringe ring and needle holder or an artery forceps for evaluating the mucosal surface and applying ring pressure to achieve hemostasis during minor skin surgery to limit bleeding. A hot surgical blade is used to cut the disposable syringe's finger guard or flange. After that, one finger flange is trimmed so that it can be used easily in the oral or vaginal cavity. Another intact flange is left intact to secure the ring with a needle holder or artery forceps and exert optimal pressure during the procedure [Figure 1a and b]. Because of the flange's

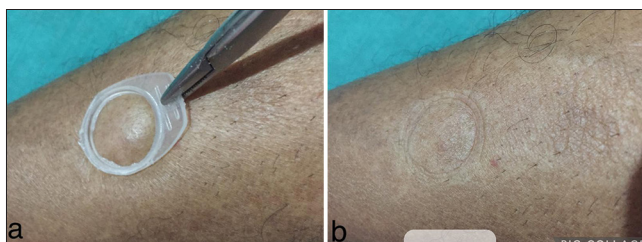


Figure 1: (a) The customized disposable ring is held with a needle holder and applied to the skin and (b) its impression.

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.

©2025 Published by Scientific Scholar on behalf of CosmoDerma



Figure 2: The ring is applied to normal buccal mucosa.



Video 1: The ring is used to examine the buccal mucosa.

sturdiness, strength, and flexibility, the holder or forceps angle can be adjusted during the examination and procedure to improve the field and hemostasis [Figure 2 and Video 1]. The size of the ring can be chosen based on the needs of the field. However, a smaller ring (5 or 10 mL syringe) has better annular occlusion ability, which can be useful in punch biopsy and granuloma pyogenicum procedures. This innovative ring is atraumatic, disposable, widely available, sterile, and inexpensive, making it simple to obtain during an inspection of mucosa and minor dermatosurgical procedures.

Ethical approval: 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.

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. Walsh EN. Pressure ring for hemostasis. *Ama Arch Derm Syphilol* 1950;62:718-9.
2. Osbourn RA. Plastic pressure ring for hemostasis. *Ama Arch Derm Syphilol* 1954;69:612-3.
3. Lee J, Russel MA. Ring hemostasis: Preserving the view. *J Am Acad Dermatol* 2023;89:e201-2.

How to cite this article: Mukhtar M, Mukhtar S. An innovative disposable ring for mucosal examination and pressure hemostasis. *CosmoDerma*. 2025;5:61. doi: 10.25259/CSDM_61_2025