

Therapeutic pearl: chemical cautery for nonresponsive post-scabetic pruritic nodules over external genitalia

Iran J Dermatol 2023; 26: 100-101

DOI: [10.22034/ijd.2021.274871.1329](https://doi.org/10.22034/ijd.2021.274871.1329)

Dear Editor,

Scabies is an ectoparasitic infestation presenting with pruritic excoriated papules and nodules with burrows in areas of loose skin and its creases. The scabetic papules may persist as nodules in about 5-7% of patients even after proper treatment, precautionary measures, and hygiene maintenance for 4 to 6 weeks. The nodules are noninfectious but are associated with severe pruritus. The cause of pruritus is a hypersensitivity reaction due to the presence of dead mites and their products in the epidermis¹. The main nodular scabies treatments are topical and intralesional steroids, tacrolimus, and pimecrolimus^{2,3}. However, resistance to topical treatments and recurrence may occur, usually handled by cryosurgery with liquid nitrogen⁴. However, liquid nitrogen has limited availability in clinics and hospitals in developing countries compared to trichloroacetic acid (TCA). In addition, hypopigmentation or depigmentation of the site treated with liquid nitrogen is possible, especially in dark-colored skin. Here, the author describes using TCA for spot chemical cauterization of nodular scabies in the clinic with a glass vial stuffed with a cotton-packed polytube applicator and a noncorrosive chemical cautery pen.

A 50-year-old (treated with two weekly doses of topical permethrin, oral ivermectin, and an antihistamine for one month) had post-scabetic pruritic nodules for more than two months on the glans of the penis and scrotum, which were nonresponsive to topical steroids and tacrolimus (Figure 1a). Hence, TCA (100%) was applied topically on the nodules (until frosting the lesions) with a small glass vial device and chemical cautery pen without spilling the

chemical on the surrounding skin (Figure 1b). After cautery, the patient was put on a topical antibiotic and oral antihistaminic (not on oral antibiotics and anti-inflammatory agents) for three weeks till the lesion healed. The patient was followed up weekly for four weeks, then fortnightly for eight weeks. The nodules became crusted after one week (Figure 1c) and healed in about three weeks with transient mild post-inflammatory hypopigmentation (Figure 1d). The patient remained asymptomatic, and pigmentary changes were not significant at the end of 12 weeks. Thus cauterization with TCA could be a good option for treating medically nonresponsive post-scabetic pruritic nodules.

The novelty of TCA cautery for post-scabetic pruritic nodules is that TCA is a readily available and inexpensive chemical agent that only needs a simple chemical device like a disposable syringe or glass vial stuffed with a cotton-packed polytube applicator and chemical fountain pen for precise spot cautery of the nodules⁵. There are a few advantages of this technique. First, spot chemical cautery prevents surrounding skin from damage, and there is less or no incidence of depigmentation compared with cryotherapy. Second, it would minimize confusion among physicians and patients about the re-infestation of the disease or the persistence of lesions after treatment. Third, the patients achieve early relief from the pruritic nodules compared to topical therapy. Finally, patients can not be over-treated, averting the misuse of scabetic drugs and the resulting drug resistance.

Conflict of interest: None declared.



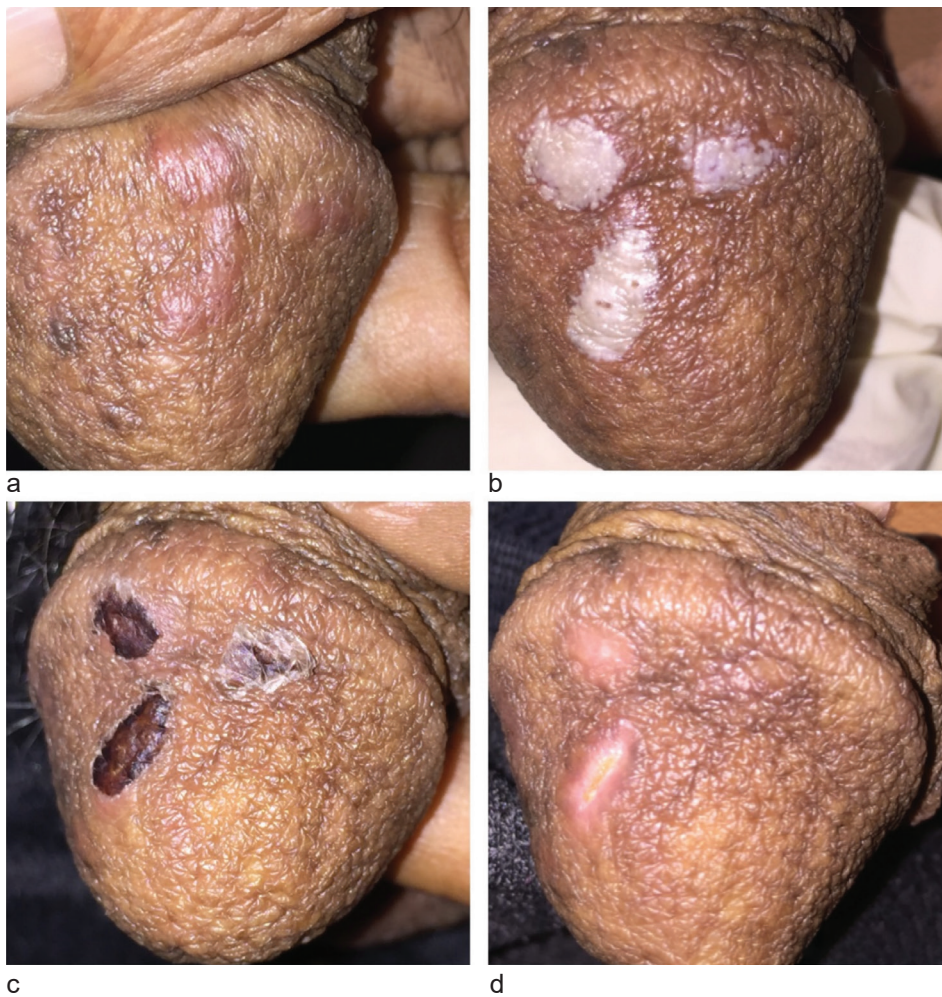


Figure 1. (a) Post scabetic pruritic nodules on glans. (b-d) Post scabetic nodules just after cautery (1b), after 1 weeks (1c) and after 3 weeks (1d) of chemical cautery

Muhammed Mukhtar, MD*
Mukhtar Skin Centre, Katihar Medical College Road,
Katihar, India

*Corresponding author:
Muhammed Mukhtar, MD
Mukhtar Skin Centre, Katihar Medical College Road,
Katihar, India
E-mail: drmmukhtar20@gmail.com

Received: 24 February 2021

Accepted: 9 May 2021

REFERENCES

1. Miura T, Ohtsuka M, Yamamoto T. Post-scabetic nodules. *J Dermatol.* 2017; 44:e210-e211.
2. Mittal A, Garg A, Agrawal N, et al. Treatment of nodular scabies with topical tacrolimus. *Indian Dermatol Online J.* 2013; 4(1):52.
3. Almeida HL, Jr. Treatment of steroid resistant nodular scabies with topical pimecrolimus. *J Am Acad Dermatol.* 2005; 53:357-8.
4. Zavar V, Pawar M. Liquid nitrogen cryotherapy in the treatment of chronic, unresponsive nodular scabies. *J Am Acad Dermatol.* 2017; 77:e43-e44.
5. Mukhtar M. Surgical pearl: noncorrosive chemical fountain pen for chemical cautery. *Turkish J dermatol.* 2021;15(1):16.