

Easy solution to difficult zones; A new technique of cryotherapy

Dear Editor

In dermatological practice, cryosurgery (also known as cryoablation or cryotherapy) is a surgical technique that utilizes extreme cold to destroy lesions on the skin and mucosal tissue. Liquid nitrogen is the most commonly used cryogen. After the effectiveness of simply applying a cotton swab to treat skin lesions has been demonstrated, different cryotherapy techniques have been developed such as the spray technique, the probe technique,¹ and intralesional cryotherapy.²

Being an inexpensive and effective therapeutic method, cryotherapy is commonly used by dermatologists to treat benign, premalign, and malignant skin lesions. However, some disadvantages with application of the classical techniques, such as the excessive cooling issue with the spray technique and the insufficient freezing issue with the cotton-wool bud technique, limits the usage of cryotherapy especially for treating pedunculated lesions or filiform warts.

In this letter, we will describe a more effective cryotherapy method for the treatment of pedunculated lesions, filiform warts, and molluscum contagiosum. A male patient with skin tag on the right upper lash line, a location which difficult to treat with classical cryotherapy techniques, is easily treated with the newly described method. Based on our observation, the new method has less side-effects when used to treat the lesions similar to those mentioned above. In addition, this technique makes it easier to treat lesions in oral mucosa, and intranasal area.



FIGURE 2 Cooling the tip of the forceps in liquid nitrogen which was transferred to the cardboard cup

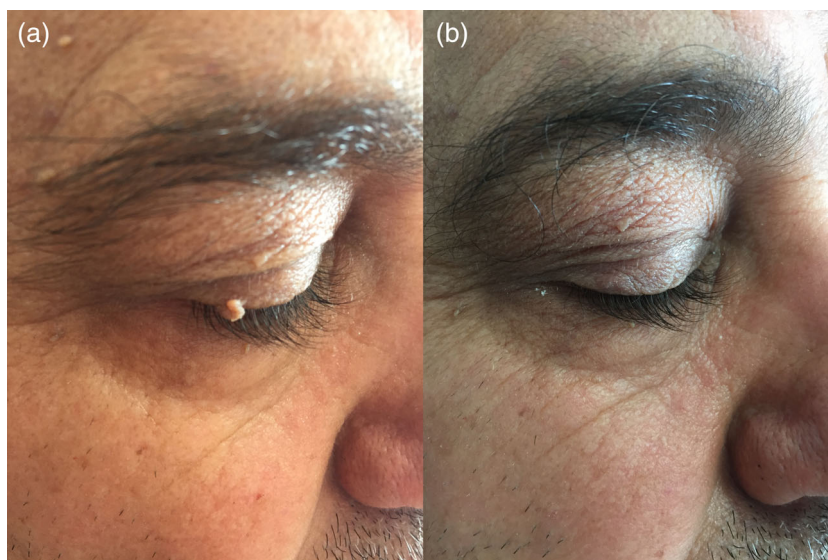


FIGURE 1 A, The lesion on the right upper lash line. B, The appearance of the right upper lash line 20 days after the second cryotherapy session

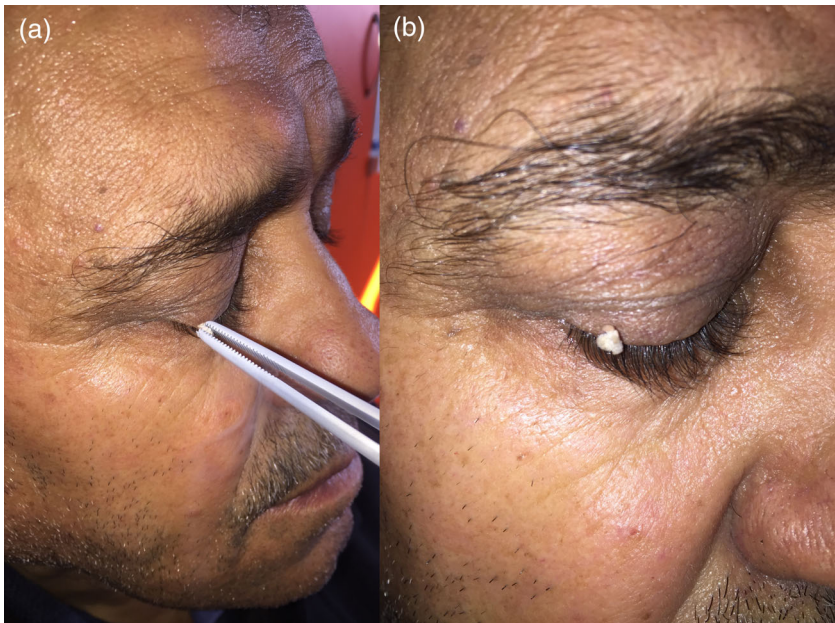


FIGURE 3 A,B, Application of the cryotherapy with forceps

A 69-year-old male patient presented to our clinic with a 1-year-old lesion on his right upper lash line. Dermatological examination revealed skin colored papilloma of $2 \times 3 \times 5$ mm in size (Figure 1A). Since a classical cryotherapy was not possible, we treated the patient using the following procedure.

We discharge carefully some of the liquid nitrogen from the cryo thermos into a cardboard cup or a hard plastic cup. After cooling a forceps in the liquid nitrogen, we squeeze the lesions with the frozen tips of the forceps (Figures 2 and 3). We performed two sessions of cryotherapy at intervals of 15 days.


When the patient returned 20 days after the second cryotherapy session, the lesion was completely disappeared (Figure 1B). The patient's pain sensation was minimal during and after the sessions and the lesion healed without leaving any scars.

Monfrecola et al described a similar method of treating small pedunculated lesions that involve retracting the lesion slightly from the skin with forceps while applying the liquid nitrogen spray at the forceps above the lesion.³ However, with this technique treatment of the lesions in oral mucosa, intranasal area, and on the lash line is not feasible considering the possible harmful effects of the liquid nitrogen on surrounding tissues.

Because of the diversity, shape, size, and location of the skin lesions treated with cryotherapy, developing new techniques strengthens clinicians to get maximum therapeutic response with minimal side effects.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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