

A simple method to visualize the regrowth of white vellus hairs using superficial cryotherapy

Intralesional corticosteroids are the treatment choice for adults with localized alopecia areata, although no published randomized controlled trials exist [1]. Hair regrowth occurs in approximately 64-97% of patients with patchy alopecia areata injected with 2.5-10 mg/mL triamcinolone acetonide, depending on different therapeutic regimens [1]. Determining evidence of hair growth is necessary to minimize the unnecessary side effects of repeated treatments, including transient atrophy and telangiectasia.

Alopecia areata seems to target pigmented hairs more than lighter hairs, but white hairs regrow first in alopecic patches [2]. Early detection of regrowing white hairs is challenging because they do not contain dark pigment. Thus, meticulous physical examinations are mandatory to check for regrowth before the re-injection of triamcinolone acetonide.

A 35-year-old male patient with alopecia areata was treated with regular injections of 5 mg/mL triamcinolone acetonide. Based on favorable therapeutic effects, we performed superficial hypothermic cryotherapy with liquid nitrogen before injecting triamcinolone acetonide. Before spraying the alopecic patch with a Cry-Ac[®] (Brymill, Witney, Oxon, UK) spray gun, white vellus hairs were inconspicuous (*figure 1A*). With a dermoscopic view, the semitransparent white vellus hairs were hardly noticeable (*figure 1B*) [3]. However, spraying induced frost around the vellus hairs, enabling visualization of the regrowing hairs, even to the naked eye (*figure 1C*).

This method of visualizing regrowing white vellus hairs, using superficial cryotherapy, is simple and rapid and may be useful to general dermatologists who are unfamiliar with dermoscopic hair findings. The therapeutic effect of superficial hypothermic cryotherapy with liquid nitrogen on alopecia areata is well known [4]. The exact mechanism of action is not known but cryotherapy may improve blood circulation within the hair follicles, enhancing topical nutrition and accelerating hair regrowth [4]. Cryotherapy is thus an adjunctive treatment to conventional therapies for alopecia areata [5]. Furthermore, cooling the skin reduces pain during injection by decreasing nerve conduction and suppressing the release of pain-production substances [6, 7].

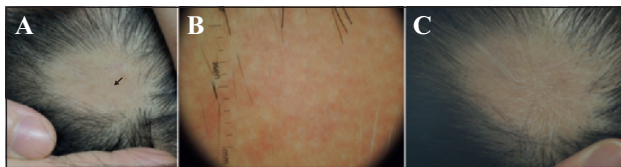


Figure 1. **A)** White, short vellus hairs are inconspicuous to the naked eye within the alopecic patch (arrow). **B)** Dermoscopic finding of the selected alopecic patch. Semitransparent, whitish vellus hairs are not noticeable under a contact polarized dermoscope (Dermlite, DL3 model, 3Gen, San Juan Capistrano, CA). **C)** Semitransparent, whitish, vellus hairs can easily be visualized when the strands are frosted after spraying with liquid nitrogen.

Based on our observations, we highly encourage the use of this technique in daily practice, especially before the injection of triamcinolone acetonide. ■

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Acneiform eruption induced by ethosuximide

Cutaneous drug reactions (CDRs) are reported for nearly all prescription medications, usually at rates exceeding 10 cases for 1000 new users [1]. The most common CDRs are maculopapular rash (37.73%) and fixed drug eruptions (17.2%), followed by urticaria (14.56%), pruritus (9.06%), flaring of tinea (6.54%) and acneiform eruptions (5.26%) [2]. Several drugs have been associated with the development of acne vulgaris-like skin eruptions: systemic and topical corticosteroids, cyclosporine, anticonvulsants, antipsychotics, antidepressants, anti-tuberculosis drugs, azathioprine, testosterone, anti-EGFR and anti-TNF- α . In particular, some anti-epileptic drugs, such as carbamazepine, phenytoin, phenobarbital, pyrimidine and lamotrigine, may cause acneiform eruptions. We report the case of an acneiform eruption occurring during epilepsy treatment with ethosuximide. A 20-year-old Italian girl