Tretinoin in Microsphere Technology Increases the Sphere of Efficacy in Verruca Plana

Sir,

Warts are a benign proliferation of skin and mucosa that result from infection with human papillomavirus HPV. HPV are the causative agents of a variety of benign and cancerous lesions of the skin and other epithelial surfaces. Plane warts occur mostly in children and young adults. The course of papillomavirus infection is variable ranging from spontaneous resolution in few to persistence and dissemination in others. However, spontaneous resolution can be expected in immune-competent patients over a variable period. Plane warts are generally caused by HPV (3, 10, 38, and others) usually occurs on the face.

A 19-year-old female presented with asymptomatic lesions over the periocular area of the right eye since eight months duration. She was not treated earlier with any medications or any procedural therapy. Cutaneous examination revealed multiple hyperpigmented flat-topped verrucous surface papules over the right periocular area and left forehead [Figure 1]. There was no evidence of lesions elsewhere. She was clinically diagnosed as a case of verruca plana and was suggested radiosurgical removal for the same. However, as she insisted on medical management, she was started on topical tretinoin 0.1% gel in microsphere technology twice daily spot application with the help of a toothpick. At the end of 3 weeks on re-evaluation, complete clearance of the lesions was noted [Figure 2].

Common warts can affect patients’ quality of life by causing adverse psychological effects or negative social perception. Many different treatments have been described for HPV-induced lesions. Various modalities such as cryotherapy, radiosurgery, electrofulguration, excision, topical application of trichloroacetic acid, salicylic acid have been studied however efficacy of these treatments is low, and there is a high rate of recrudescence and adverse effects (such as scarring). Although well-controlled studies with topical retinoids are lacking various reports and literature has shown promising results with the same.[1,2]

Retinoids exert their physiologic effects on DNA transcription by binding to two distinct families of nuclear receptors, RARs, and RXRs. Retinoids also help in regularizing epidermal proliferation thereby leading to shedding of viral elements present in epidermis. Topical retinoids had been used successfully in the treatment of plane warts with a variable success rate.[3,4]

Cutaneous side effects like irritation, redness, scaling reduce the popularity of topical retinoids as the choice for therapeutic modality. As the active ingredient is “housed” within the microsphere particle, its slow release avoids an epidermal “overload” of active drug thus reducing irritation. Microsphere technology eliminates the rapid delivery of high concentrations of active drug to the application site and instead facilitates controlled release of potentially irritating drugs. It is associated with improved treatment outcomes and minimal irritation.[5] A potential advantage of microsphere technology is that epidermal delivery is targeted with a lower transdermal penetration and systemic exposure. Agents that are sensitive to ultraviolet light, such as tretinoin, are significantly protected from degradation while entrapped within the microsphere particles.

Figure 1: Verruca plana over the right periocular area.

Figure 2: Clearance on the right side posttreatment.
We hereby report this case to highlight that topical retinoids in microsphere formulation is a better choice for treating verruca plana on the face and other sensitive areas as this technology decreases the irritant potential and thereby increases the sphere of compliance.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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Levetiracetam-induced Maculopapular Rash: A Rare Side Effect

Sir,

Levetiracetam (LEV) is a novel second-generation antiepileptic drug considered relatively safe compared with other antiepileptics with regard to skin eruptions. We report a case of a cutaneous reaction in a young male which was diagnosed and treated early with a good outcome. This case is reported for awareness in dermatologist and neurophysician about this relatively new drug and its side effects and management.

To date, there are only few cases reported involving skin reactions from LEV. Two of the cases were classified as Stevens–Johnson Syndrome: One as toxic epidermal necrolysis and one as erythema multiforme. Our case was classified as a morbilliform rash (maculopapular rash), which was promptly diagnosed and successfully treated in an Intensive Coronary Care Unit setup.

A 20-year-old male student came with complaints of pruritic generalized reddish skin lesions of 2 days duration with severe itching and high degree fever. Initially, lesions were reddish macules and patches covered with scales over the face and extremities which progress to involve full body in 3–4 days. The patient was an old case of epilepsy was taking phenytoin sodium since last 7 years, and neurophysician added LEV 500 mg/day few days back. The patient started getting severe itching, fever, and rashes within few days after taking this new drug.

On cutaneous examination, he had generalized diffuse erythematous rash with in between skin was normal, suggestive of maculopapular rash (morbilliform rash). Rash was erythematous, edematous with scaling and tiny pustules over the face and trunk [Figure 1a and Figure 2a].