INTRODUCTION

Erosive pustular dermatosis of the scalp (EPDS) is an inflammatory condition of the scalp characterized by chronic sterile pustules and crusted erosions leading to severe skin atrophy and cicatricial alopecia. The etiology is unknown, but thought to be predisposed by cutaneous atrophy and an inciting trauma. EPDS is often chronic and potent topical steroids result in good response. If the need for topical immunosuppression is prolonged, steroid-sparing agents such as tacrolimus are used as an alternative regimen to prevent further atrophy.

Here, we present a case with several unique features: (1) a rare case of EPDS occurring after herpes zoster (HZ) infection and (2) the first reported case of recurrence of HZ induced by topical immunosuppressive therapy (clobetasol 0.05% cream and tacrolimus 0.01% cream) in a patient with underlying EPDS.

CASE REPORT

A 62-year-old female with no significant medical history presented with a 2-year history of erosive pustulosis of the scalp after an outbreak of HZ (positive Tzanck smear) involving her right forehead and scalp in V1 distribution (trigeminal nerve). Initially, for HZ, she was treated with famciclovir 1 g three times daily (TID) with resolution. However, she continued to have itch and persistent crusting of the scalp in a linear distribution corresponding to the previous HZ V1 distribution.

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ABSTRACT

We present a unique patient with erosive pustular dermatosis of the scalp (EPDS) with several unique features: (1) a rare case of EPDS occurring after herpes zoster (HZ) infection and (2) the first reported case of recurrence of HZ induced by topical immunosuppressive therapy (clobetasol 0.05% cream and tacrolimus 0.01% cream) in a patient with underlying EPDS. Based on our patient, we recommend to exercise caution with the prolonged use of potent topical steroids in areas previously affected by herpes zoster.

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eruption. The clinical features and histopathology were consistent with EPDS\textsuperscript{[1]}. The patient was accordingly started on clobetasol 0.05% cream once a day. She had improvement of pain and crusting, as well as partial hair regrowth of the alopecic patches. Treatment was tapered. After a few months, she experienced a flare and clobetasol 0.05% QD was restarted. After 5 months of on-and-off therapy, she was transitioned to tacrolimus 0.1% daily. After an additional 3 months, she presented with an acute vesicular eruption in the same area of previous HZ and was diagnosed with recurrent HZ (+positive Tzanck) [Figures 1 and 2]. Notably, there was no ocular involvement. She completed a course of famciclovir 1 g TID with resolution. She was seen in follow-up and continues to do well on a maintenance regimen of topical tocopherol spray [Figures 3 and 4]. Topical immunosuppression was not restarted as it was thought to contribute to the HZ recurrence.

DISCUSSION

Our case emphasizes several important features. First, there are only six reported cases to date of EPDS following HZ.\textsuperscript{[1-4]} Second, and perhaps more importantly, our case highlights recurrence of HZ from chronic topical immunosuppression in the setting of EPDS. HZ infection has recently been reported after use of topical and intralesional steroids for tumid lupus.\textsuperscript{[5]} In addition, it has been reported that prolonged use of tacrolimus 0.1% for atopic dermatitis resulted in varicella zoster infection at site of application.\textsuperscript{[6]} Otherwise, little is known about the risk of topical immunosuppression and the risk of HZ reactivation. We recognize that topical steroids are commonly used to treat inflammatory skin conditions and are generally safe when used in the right clinical settings.
However, this association raises concern that there may be an increased risk with prolonged use of topical immunosuppression, particularly in specific patient groups. We recommend increased caution with topical steroid use in an area with previous HZ infection.

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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