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Generalized Eosinophilic Pustular Folliculitis of Infancy Responding to Hydroxyzine

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Dear Editor:

We report a case of generalized eosinophilic pustular folliculitis of infancy (EPFI) involving the scalp, face, trunk, and both lower extremities that was treated with a topical corticosteroid and hydroxyzine. Interestingly, the lesions responded to hydroxyzine in a dose-dependent manner. A 3-month-old female infant presented with itchy erythematous papules and pustules on the face, trunk, and legs that had been present since birth (Fig. 1A～C). We performed a routine blood test and skin biopsy on a pustule of the trunk. Laboratory tests showed eosinophilia (eosinophil count: 5.19×10^9/L, normal range: $0.05\sim0.45\times10^9$/L), and histopathologic examination showed subcorneal pustule formation, and perivascular lymphohistiocytic and eosinophilic infiltration (Fig. 2). Therefore, a diagnosis of EPFI was made, and she was treated with topical methylprednisolone aceponate 0.1% ointment twice daily and oral hydroxyzine 10 mg/day. Her symptoms and lesions improved greatly within 3 weeks. However, she showed aggravation during hydroxyzine withdrawal; when hydroxyzine treatment was consequently resumed, the lesions improved dramatically (Fig. 1D～F). Eosinophil count decreased to 0.73×10^9/L 3 months later.

EPFI, a relatively rare dermatologic disease that develops in early infancy, is usually characterized by recurrent crops of papules and pustules on the scalp and other body areas[1]. The etiology of EPFI remains unknown but may be associated with some genetic susceptibility because of its male predilection and higher incidence in Caucasians[2]. Because many reported cases have not demonstrated true follicular involvement, some authors propose the term "eosinophilic pustulosis of infancy" is more suitable[2,3]. EPFI must be differentiated from other dermatological diseases characterized by recurrent grouped papules and pustules occurring in the neonatal period. However, EPFI develops most frequently in first months of life, and over 80% of patients experience spontaneous resolution by 3 years of age[2]. Moreover, most cases present with multiple pruritic lesions on the scalp and are associated with tissue eosinophilia or blood eosinophilia. Good response to topical corticosteroids is strongly indicative of EPFI[2]. Erythema toxicum neonatorum may exhibit similar cutaneous manifestations and histopathologic findings in neonates. However, EPFI may be distinguished from this disease according to its recurrent nature, predilection towards the scalp, and associated blood eosinophilia (83%) during attacks[2].

There are various treatment options for EPFI, including topical corticosteroids, topical calcineurin inhibitors, and oral antihistamines[3]. Some refractory cases can be treated with erythromycin[3], dapsone[3], or indomethacin[4], but the effectiveness of these medications varies. EPFI usually responds well to topical corticosteroids[2,4] unlike EPF in adults. The present case showed slight improvement after the topical corticosteroid was administered and an excellent response after hydroxyzine treatment was initiated. Oral antihistamines such as cetirizine[2] have been successfully used by clinicians; interestingly, the present case presented with lesion fluctuation with respect to the use of hydroxyzine or lack thereof.

The generalized form of EPF is reported to be associated with several medications, especially allopurinol[5], whereas EPFI is not. However, in patient case, we observed disseminated papules and pustules on nearly the entire body

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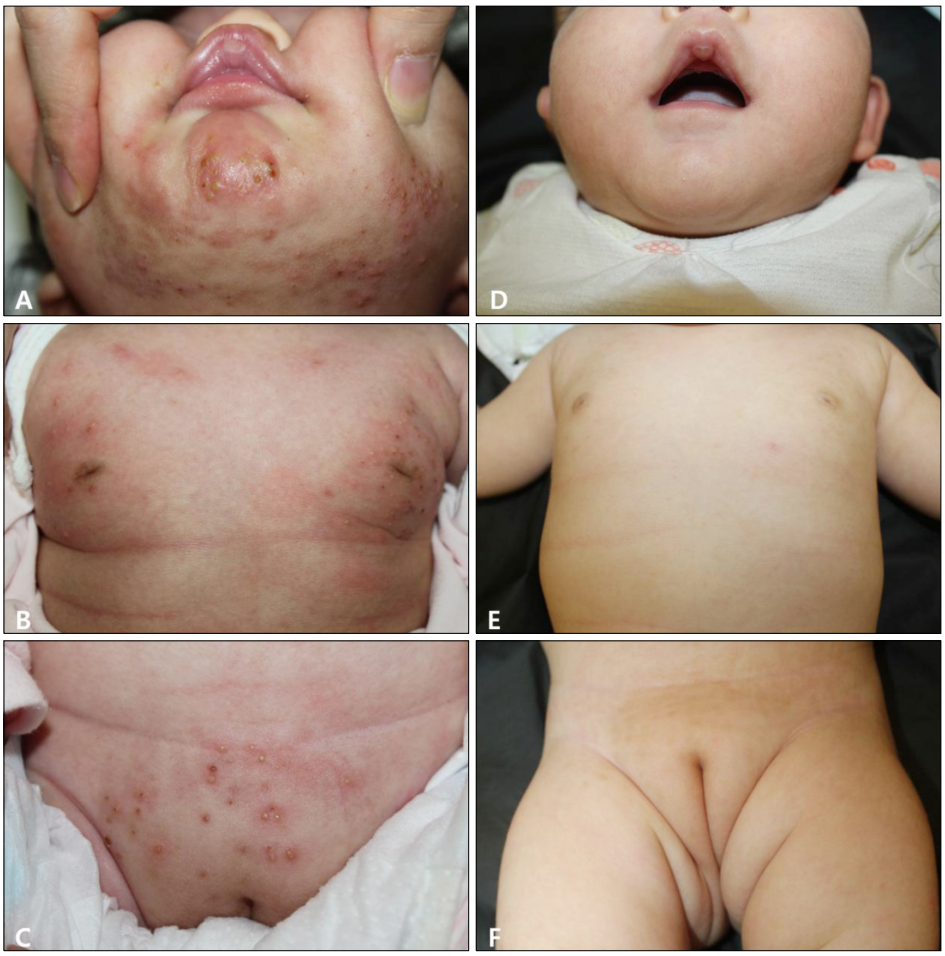

Fig. 1. (A∼C) Crops of papules and pustules on the face, chest, and pubic area at presentation. (D∼F) After treatment with oral hydroxyzine, the skin lesions resolved almost completely without scarring.

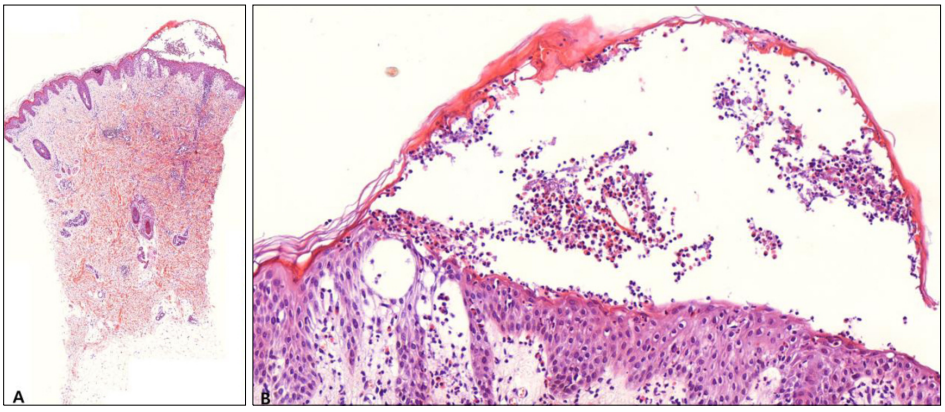

Fig. 2. Subcorneal pustule formation and perivascular lymphohistiocytic infiltration with many eosinophils (H&E; A: ×50, B: ×200).

without a previous history of medication. Although the present case is considered to belong to same disease spectrum as the localized form, generalized EPFI developing in a patient without a history of medication has never been reported.

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A Case of Gonadotropin-Releasing Hormone Agonist-Induced Sterile Abscess Showing a Good Response to Systemic Steroid Therapy

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Dear Editor:

Prostate cancer is a common malignancy in men, and its incidence is increasing rapidly. Because prostate cancer shows androgen dependency in the early stages[1], androgen-deprivation therapy with gonadotropin-releasing hormone (GnRH) agonists is the most effective systemic treatment[2]. Leuproreline (Lucrin; Abbot, Amstelveen, The Netherlands) is a GnRH agonist that blocks pituitary GnRH receptors, leading to the downregulation of luteinizing hormone and follicle-stimulating hormone[3]. This chemical castration provides long-term maximal androgen deprivation[1].

A 79-male-old man, who had painful tender erythematous subcutaneous nodules on the abdomen, visited our dermatologic department in June 2012. He received androgen-deprivation therapy consisting of pretreatment with leuprorelin 11.25 mg at 3-month intervals to treat underlying prostate cancer. A lesion arose from a previous leuprorelin injection site 2 weeks after the last injection (Fig. 1A). He was initially treated with antibiotics and non-steroidal anti-inflammatory drugs, but no improvement was observed. Subsequent histological examination showed neutrophilic and eosinophilic infiltration in the reticular dermis (Fig. 2). Laboratory examination results, including bacterial culture and tuberculosis polymerase chain reaction, were negative. Therefore, he was diagnosed with a sterile abscess caused by GnRH agonist injection and treated with systemic methylprednisolone 16 mg/day. The lesion had almost cleared after 4 weeks and remains in remission as of writing (Fig. 1B).

Leuprorelin, a GnRH agonist, is the most effective ther-

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