Scabies in a 2-month-old Infant Successfully Treated with Lindane

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Diagnosis of scabies in young children can be challenging since the morphology and distribution of skin lesions may differ from adults. Therefore, clinicians should keep scabies in mind in their differential diagnosis in a child who presents with severe pruritic, polymorphic skin lesions. Regarding the treatment of scabies, the reported clinical experience with gamma benzene hexachloride (lindane) in young children is quite limited because of its neurotoxicity. However, a recent review suggests that lindane is an excellent alternative drug with minimal risk. We report the case of a 2-month-old male infant with pruritic, erythematous macules, papules, nodules, vesicles, and pustules from the top of the head to the tip of the toes. Initially, he was thought to have impetigo and antibiotics were prescribed. After obtaining a careful history and with the use of skin scraping, he was diagnosed with scabies. He was successfully treated with lindane with no adverse reactions. (Ann Dermatol 21(2) 2009: 201-202)

-Keywords-
Infant, Lindane, Scabies

INTRODUCTION

The topical scabicides presently recommended as therapeutic agents include 5% permethrin and 1% lindane. Although 5% permethrin is preferred for the treatment of scabies because of its low toxicity, gamma benzene hexachloride (lindane) is still widely prescribed because of its easy availability. Nevertheless, the potential neurotoxicity of lindane, especially for young children with repeated applications, has limited its use. A recent review has concluded that the risk of lindane neurotoxicity is minimal if used properly. We report the case of a 2-month-old infant who was diagnosed with scabies and successfully treated with lindane without any adverse effects.

CASE REPORT

A 2-month-old male infant presented in August (the summer season in Korea) with small, erythematous macules, papules, nodules, vesicles, bullae, and pustules, some of which were excoriated and surmounted by blood crusts. The distribution of the lesions involved the whole body area, including the face, neck, trunk, palms, and soles (Fig. 1). The excoriated papules and nodules on the infant’s hands and fingers were peculiar (Fig. 2). Although the patient had pruritus and thus kept rubbing the lesions, he did not show any signs of systemic toxicity or laboratory abnormalities. He had been admitted to the pe-
Fig. 2. Conspicuous crusted and excoriated nodules on the infant’s hands and fingers.

An infant can exhibit erythematous macules, papules, vesicles/bullae, and pustules due to many different causes. In our case, the baby manifested macules, papules, vesicles, and crusted pustules at the same time. The differential diagnosis included varicella-zoster, other viral exanthema, impetigo, folliculitis, infantile seborrheic dermatitis, and Letterer-Siwe disease. We speculate that the pediatrician thought it was an infectious disease because infectious skin diseases, including impetigo, are common in children, especially during the summer season. In temperate climates, scabies is more common in the winter than in the summer because mites can survive longer on fomites in colder temperatures and thus do not need the close level of contact necessary for transmission.

Typical manifestations of scabies in infants are different from adults. With respect to scabies, infants are more likely to develop vesicles, pustules, and crusting than older children or adults. Young children and infants often show heavy involvement of the palms and soles and all aspects of the fingers, and may even show evidence of mites under the nail plates. In addition, the face and scalp area may also be involved, which are usually spared in older children and adults. On the other hand, lesions in children are usually more inflammatory than in adults and are often vesicular or bullous. Though scabies in young children are different from adults, the combination of a pruritic eruption with characteristic manifestations, and family involvement are usually sufficient to establish the diagnosis. In the present case, the relevant family history and detection of a scabies mite led to the correct diagnosis, despite the highly varied, polymorphic lesions.

Treatment consists of application of 5% permethrin cream at bedtime to all skin surfaces in infants and from the neck down in older family members; it should be washed off after 8∼14 hours. Repeated applications may be needed, as the failure rate is significant. Ten to twenty percent of patients require retreatment in 7∼10 days. An alternative therapy for newborns is the application of 5% to 10% precipitated sulfur in petrolatum. Permethrin has less neurotoxicity than lindane, particularly in children, and is therefore preferred in North America. Thus, despite its higher cost, 5% permethrin is recommended by the Center for Drug Evaluation and Research (CDER) in the USA as first-line topical therapy for scabies. In Korea, permethrin cream is not available commercially. Crotamiton is another alternative for scabies treatment. The efficacy of crotamiton against scabies, however, is low. Since in our hospital the only scabicide that can be prescribed is lindane, we treated the patient with it.
male baby. He had erythematous nodules on the trunk, with scabies. There is a reported case in a 3-month-old infantile nodular scabies: the usefulness of dermoscopy for in vivo detection of scabies. Korean J Dermatol 2008;46:86-89.

REFERENCES