

c.994_995delCA mutation in a 19-year-old Iranian female patient. Interestingly, that patient had no mucosal involvement except dental plaques. This may imply an association between the mutation and mucosal-sparing features. Has et al.³ suggested genotype-phenotype correlations in KS because some patients with a missense mutation or in-frame deletion demonstrate a mild phenotype. However, only two cases including ours have been reported to date and our patient might be too young to have developed mucosal lesions. Further studies are needed to clarify this association.

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<http://dx.doi.org/10.5021/ad.2016.28.4.505>



A Case of Facial *Sarcoptes scabiei* in a Female Child

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Dear Editor:

Scabies in infants and young children differs from adult scabies infection and is frequently misdiagnosed¹.

An 8-year-old female presented with erythematous scaly pustules on her cheeks that start 3 months prior and had spread to her forehead. She was diagnosed at a local clinic with folliculitis, at which time she was treated with anti-

Received May 18, 2015, Revised June 8, 2015, Accepted for publication July 27, 2015

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Fig. 1. Scattered, 2~3 mm sized, erythematous scaly pustules and a firm nodule on the face.

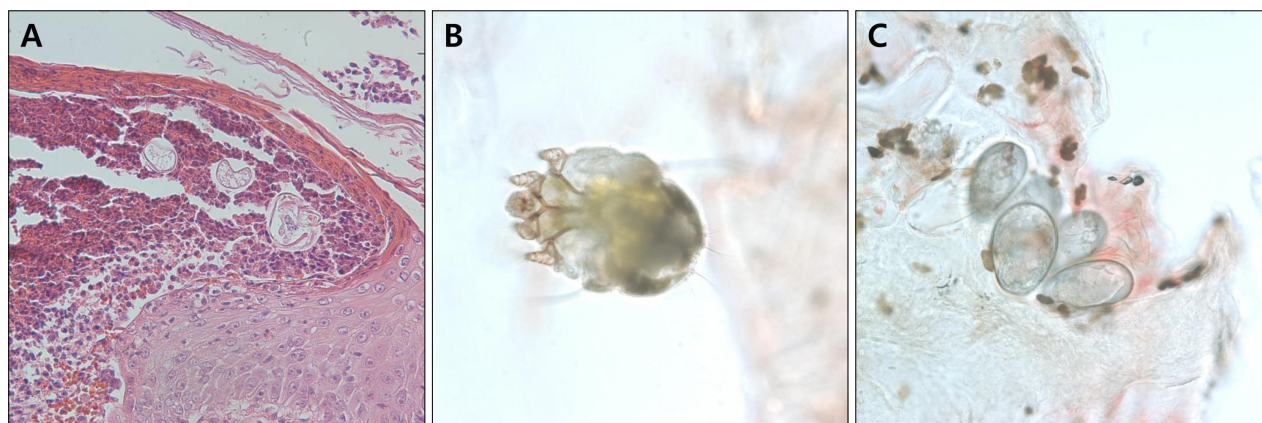


Fig. 2. (A) Foreign materials considered as scabies were located in the upper portion of the epidermis with lots of eosinophils (H&E, $\times 400$). (B) Scabies, (C) eggs and scybala were found on the skin scraping of papule on her left cheek with mineral oil test under light microscopy ($\times 200$).

biotics and an antihistamine. The lesions were not resolved and she was brought to our hospital. Physical examination revealed scattered, 2~3 mm sized, erythematous scaly pustules over the face and an erythematous firm nodule on the left cheek (Fig. 1) with mild intermittent itching. She didn't have any skin lesions on the other site. This child had been hospitalized for 2 months due to burn injuries across the body before 6 months ago, but was found to be immunocompetent and there were no particular abnormal findings. There was no family history of similar lesions. Differential diagnoses of eosinophilic pustular folliculitis and contact dermatitis were considered. Histopathologic findings of a skin biopsy showed foreign materials considered to be scabies located in the upper portion of the epidermis with many eosinophils (Fig. 2A). To confirm the diagnosis, skin scraping of papule on her left cheek with mineral oil of the face was examined under light microscopy and scabies, eggs and scybala were found (Fig. 2B, C). We treated her with crotamiton cream, however could not follow-up her because she had return to homeland, Kazakhstan.

Scabies can be one of the most difficult conditions to diagnosis because of variable clinical features². Scabies should be considered in infants or young children with generalized itch of recent onset. The classical eruption of scabies presents as pruritic papules, vesicles, pustules and linear burrows³. However, most young patients only have an admixture of primary lesions with excoriation, eczema, crusting and/or secondary infection. Excoriations, crusting and eczema can completely obscure these primary lesions, which is why scabies in infants and young children is frequently misdiagnosed⁴.

Our patient represents an unusual case of *Sarcoptes scabiei* infection exclusively confined to the face. Among

children's scabies infection, the frequency of infection on the face is only 8.9%⁵, and infection confined to only the face in immunocompetent children has not been reported until now, to the best of our knowledge. We propose some precipitating factors in this case. First, the patient had hypertrophic scars on the arms and hands due to previous burns. The hypertrophic scarring might provide a poor environment for living scabies. Second, the facial involvement of scabies is a known feature for infants, children and immunocompromised patients. The reason may be related to different cutaneous microbiomes, such as malassezia species.

In cases of non-typical clinical symptoms of scabies infection in children, the elderly, and immunocompromised patients, who may suffer long periods without being treated properly as in this case, a spread of infection can occur. Dermatologists should bear in mind that scabies infection is not uncommon with recalcitrant persistent itch, and that signs such as pruritic papules and linear burrows may disappear.

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