



DOI: 10.5505/anatoljfm.2022.57855

Anatol J Family Med 2022;5(3):184–186

Diagnostic Challenges with Scabies: Report of Two Cases and Literature of Review

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ABSTRACT

Infantile acropustulosis is characterized by recurrent intensely itchy vesiculopustular lesions. Although its etiology has not been clarified, its relationship with scabies is still under discussion. In this review, the clinical findings of a 3-month-old male patient who presented with vesiculopustular lesions starting from the soles of the feet, and a 5.5-month-old male patient who presented with erythematous papulopustular lesions unresponsive to topical steroid therapy are presented considering the literature. In cases with scabies-like lesions, making differential diagnosis with the opinion of pediatricians and dermatologists will prevent unnecessary drug use and possible drug resistance development.

Keywords: Atopic dermatitis, eczema, infant, scabies



Please cite this article as: Atay Ö, Asılsoy S, Aktan Ş, Uzuner N. Diagnostic Challenges with Scabies: Report of Two Cases and Literature of Review. *Anatol J Family Med* 2022;5(3):184–186.

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Received Date: 24.03.2022

Revision Date: 12.06.2022

Accepted Date: 30.11.2022

Published online: 30.12.2022

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INTRODUCTION

Infantile acropustulosis (IA) was first described in 1979 as an itchy vesiculopustular eruption of the palms and soles of the feet.^[1,2] Although its etiology is unknown, it has been suggested in publications that there is scabies sequela or a non-specific hypersensitivity reaction to scabies, since many patients have received scabies treatment. Especially scabies and atopic dermatitis should be considered in the differential diagnosis of the disease.^[3] Topical corticosteroids are the first choice in the treatment of IA.^[4]

CASE REPORT

Case 1

A 3-month-old male patient was admitted to our clinic due to acne-like rash and discomfort that started on the soles of the feet and spread to the trunk and scalp for the past month. His father received treatment with the diagnosis of scabies in the 5th month of the pregnancy. In the period of our patient's lesions, there was no similar rash complaint in his family and people he had contact. Vesiculopustular lesions were common on the soles of the feet and sparse on the trunk and scalp in the physical examination (Fig. 1). The absolute eosinophil count (AEC) was 1100/uL (7.7%) (Normal range: 0–500/uL; 0–4%). Total IgE level was 5.88 IU/mL (Normal range: 0–16.26 IU/mL). We advised our patient, who was diagnosed with IA, to use topical hydrocortisone treatment for 5 days because of the absence of a clinical appearance compatible with tunnel lesions and scabies in the dermatoscopic examination of the patient. His lesions regressed significantly in the control examination, and clinical follow-up was recommended for possible recurrences.



Figure 1. Vesiculopustular lesion on the sole of a patient diagnosed with infantile acropustulosis.

Case 2

A 5.5-month-old male patient was admitted to our clinic due to the increase in itchy lesions on the body for the past 3 months. It was learned that the lesions firstly affected the trunk and then spread to the inside of the hands and feet, and then topical steroid treatments were applied in a different center with the diagnosis of atopic dermatitis, but his lesions did not decrease and became more widespread. Similar lesions in his mother had been present for the past month. Erythematous papulopustular excoriation areas were observed on the palms, soles, and anterior trunk of the patient (Fig. 2). In the laboratory of the patient, AEC was 1500/uL (10.3%) (Normal range: 0–500/uL; 0–4%), total IgE was 168 IU/mL (Normal range: 0–16.26 IU/mL), milk, egg white, egg yolk, and wheat specific IgE was <0.10 kU/L (Normal range <0.35 kU/L). The patient was evaluated by



Figure 2. Erythematous papulopustular excoriation areas on the hand, foot, and trunk of a patient diagnosed with scabies.

the dermatology clinic and had tunnel lesions on skin examination with a dermatoscope. On that, we started family-wide topical permethrin therapy. It was recommended that the patient be followed up in the dermatology clinic.

DISCUSSION

IA is a disease with a chronic course, mostly located in the distal extremities, benign, recurrent, itchy, self-limiting, and vesiculopustular rashes.^[5] It may be present at birth or onset may occur any time between the ages of 2 and 3 years.^[6] Lesions usually last up to 14 days, resolve spontaneously, and recur within the next few weeks. Scabies is important in the differential diagnosis of IA.^[7] Scabies causes an itchy papulopustular rash, usually on the palms and soles. With scabies treatment, papulopustular lesions can persist for months, even if *Sarcoptes scabiei* mites or eggs can no longer be detected.^[5-8]

Although scabies was considered primarily due to the appearance of the lesions in our first case, we made the diagnosis of IA by consulting the dermatology clinic because there was no history in family members, and the lesions lasted more than 1 month. In our second case, the lesions were pustular on the trunk first, and the absence of family history was confused with atopic dermatitis, resulting in the application of topical steroid therapy.

In the differential diagnosis of diseases, it was desired to benefit from the laboratory after the history and physical examination. Therefore, it was planned to use eosinophil, total IgE, and food-specific IgE levels to differentiate a possible atopy. However, they did not contribute much.

The fact that scabies treatment was applied primarily in many patients with IA has attracted the attention of clinicians, and the observations about this situation have been evaluated with various case reports in the literature. Dromy et al. evaluated 25 pediatric patients with IA.^[5] They reported that all patients had been treated for scabies before, and 11 of 23 families had a positive history of scabies. In a case series with IA evaluated, it was concluded that all cases were associated with scabies, and IA could be a non-specific hypersensitivity reaction to *Sarcoptes scabiei*.^[1] Scabies therapy is ineffective in IA patients.^[8-9] Unlike scabies, various treatment options are preferred in the treatment of IA, including topical corticosteroids, oral antihistamines, oral erythromycin, and oral dapsone.^[6]

Neither of our patients had received any treatment for scabies before. We preferred topical steroid therapy in our patient who was diagnosed with idiopathic IA because of the long-lasting and widespread lesions. Family-wide anti-scabietic therapy was initiated for our patient who was diagnosed with scabies.

CONCLUSION

Many family physicians arrange scabies treatment themselves. In cases where there is no typical clinical findings and family history, or when there is no response to treatment, obtaining the opinion of pediatricians and dermatologists will enable the recognition of other diseases in the differential diagnosis and prevent unnecessary tests and treatments.

Disclosures

Conflict of Interest: The participant has consented to the submission of the case report to the journal.

Peer-review: Externally peer-reviewed.

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Authorship contributions: Concept – Ö.A., S.A.; Design – Ö.A., Ş.A.; Supervision – Ş.A., S.A., N.U.; Materials – Ö.A., Ş.A.; Data collection and/or processing – Ö.A., Ş.A., S.A.; Analysis and/or interpretation – Ö.A.; Literature search – Ö.A., Ş.A., S.A.; Writing – Ö.A.; Critical review – Ö.A., S.A., Ş.A., N.U.

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