

Case Report

Open Access

Acropustulosis of Infancy in Yemeni Infants and Children Mohammed Abdul Qader Almalmi Consultant of Dermatology and Aesthetic Medicine in Doctor Almalmi Clinic Sanaa Yemen and Specialist Dermatology and Aesthetic Medicine in be you Plus Clinic Dubai UAE

Mohammed Abdul Qader Almalmi

Consultant Dermatology and Assistant Professor of Dermatology, Sanaa University Medical School, Alkuaiat University Hospital, Doctor AlMalmi Medical Clinic DAMC, Sanaa Republic of Yemen, Alhasabah Zone, Yemen

ABSTRACT

Background: Infantile acropustulosis is a recurrent, self-limited, pruritic, vesicopustular eruption of the palms and the soles occurring in young children during the first 2-3 years of life. Newly described in 1979, it is probably much more common than the scarcity of reports would imply.

Objective: The objective of the study was to identify the pattern of pruritic vesicopustular skin eruptions in Yemeni infants.

Patients and Methods: Twenty five male and females Yemeni infants patients 1 to 3 years old presented with pruritic erythematous macules or papules that progress into vesicles and then pustules in the palms, the soles, and the lateral surfaces. Lesions may occur on the dorsal aspects of the hands and the feet as well as the trunk, the scalp, and the face. The intensity and the duration of attacks diminish with each recurrence. No other organ systems are involved. They treated with topical Betamethasone cream or ointment and systemic antihistamine. The skin biopsy followed by histopathological examination was not specific.

Results: The clinical data and the investigations showed that the 25 Yemeni infants had acropustulosis.

Conclusion: Acropustulosis of infancy in Yemeni infants is very common skin disorder. The bad hygiene may play an important role in the etiology or allergic substances. It is not recurrence.

*Corresponding author

Mohammed Abdul Qader Almalmi, Consultant Dermatology and Assistant Professor of Dermatology, Sanaa University Medical School, Alkuaiat University Hospital, Doctor AlMalmi Medical Clinic DAMC, Sanaa Republic of Yemen, Alhasabah Zone, Yemen.

Received: June 11, 2024; **Accepted:** June 19, 2024; **Published:** July 31, 2024

Comment

The classic history of infantile acropustulosis is an infant aged 2-12 months developing recurrent crops of pruritic erythematous macules or papules that progress into vesicles and then pustules. Lesions typically follow this progression over the course of 24 hours. Onset is usually in the first 3 months of life but lesions may sometimes be present at birth. Children are fretful, irritable, and obviously uncomfortable, but otherwise healthy. Lesion are intensely pruritic and individual bouts of infantile acropustulosis last 3-14 days and recur in 2- to 4-week intervals. The attacks occur with progressively diminishing numbers of lesions, and with decreasing frequency, until they cease altogether. This typically occurs within 2 years of onset. Often, children have been empirically treated with antiscabies medicines prior to presentation, and some have been treated with topical or oral antibiotics as well. The intensity and the duration of infantile acropustulosis attacks diminish with each recurrence. Children with acropustulosis may

be misdiagnosed with bacterial infections, hand-foot-and-mouth disease (Coxsackievirus or Enterovirus infection), or dyshidrotic eczema. Acropustulosis of infancy is characterized by recurrent outbreaks. Lesions begin as crops of small macules or papules that eventually form distinct, noncoalescing vesicles and pustules. Lesions occur in an acral distribution, usually involving the palms, soles, and lateral surfaces of the digits. Less frequently, lesions may occur on the dorsal hands, feet, trunk, scalp, and face. They resolve with desquamation followed by postinflammatory macular hyperpigmentation. No other organ systems are involved (Figure 1 and 2). Secondary bacterial infection of excoriated lesions may occur. A unilocular, subcorneal or intraepidermal pustule containing polymorphonuclear neutrophils or eosinophils in the upper epidermis and extending into the stratum corneum is characteristic in infantile acropustulosis. Papillary dermal edema and a mild perivascular, mostly lymphocytic, infiltrate in the dermis may be present (figure 3). Treatment is often not

needed. The following are sometimes prescribed Topical steroids Oral antihistamines Dispnone, for difficult cases and permethrin cream 2,5 mg and crotamiton cream . Appropriate workup for glucose-6-phosphate dehydrogenase (G6PD) deficiency should be considered before prescribing oral dapson, owing to the risk of hemolysis [1-18].



Figure 1: Pustules



Figure 2: Pustules

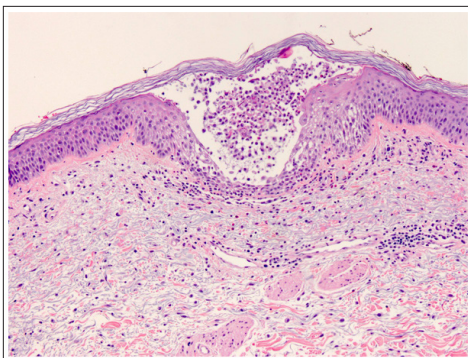


Figure 3: Sub Corneal or Intraepidermal Pustule

References

1. Kahn G, Rywlin AM (1979) Acropustulosis of infancy. Arch Dermatol 115: 831-833.
2. Zuniga R, Nguyen T (2013) Skin conditions: common skin rashes in infants. FP Essent 407: 31-41.
3. Humeau S, Bureau B, Litoux P, Stalder JF (1995) Infantile

- acropustulosis in six immigrant children. *Pediatr Dermatol* 12: 211-214.
4. Prendiville JS (1995) Infantile acropustulosis--how often is it a sequela of scabies?. *Pediatr Dermatol* 12: 275-276.
5. Mancini AJ, Frieden IJ, Paller AS (1998) Infantile acropustulosis revisited: history of scabies and response to topical corticosteroids. *Pediatr Dermatol* 15: 337-341.
6. Chiu Y, Humphrey S (2018) Congenital cutaneous lesions and infantile rashes. Bordini BJ, Basel D, Toth H, Lye PS, Kliegman R, eds. *Nelson Pediatric Symptom-Based Diagnosis* 18: 851-865.
7. Good LM, Good TJ, High WA (2011) Infantile acropustulosis in internationally adopted children. *J Am Acad Dermatol* 65: 763-771.
8. Howard RM, Frieden IJ (2015) Vesicles, pustules, bullae, erosions, and ulcerations. Eichenfield L, Frieden I, Mathes E, Zaenglein A, eds. *Neonatal Dermatology and Infant Dermatology*. 3rd Ed. Saunders 15: 111-139.
9. Minkis K, Aksentijevich I, Goldbach-Mansky R (2018) Interleukin 1 receptor antagonist deficiency presenting as infantile pustulosis mimicking infantile pustular psoriasis. *Arch Dermatol* 148: 747-752.
10. Infantile acropustulosis (2013) Larralde M, Boldrini MP, Luna PC, Abad ME, Marín CC. *Dermatología Argentina* 16: 268-271.
11. Truong AL, Esterly NB (1997) Atypical acropustulosis in infancy. *Int J Dermatol* 36: 688-691.
12. Tucker M, Ramolia P, Wells MJ (2013) JAAD Grand Rounds. Neonate with extensive papulovesicles. *J Am Acad Dermatol* 68: 877-879.
13. Vicente J, España A, Idoate M, Iglesias ME, Quintanilla E (1996) Are eosinophilic pustular folliculitis of infancy and infantile acropustulosis the same entity?. *Br J Dermatol* 135: 807-809.
14. Dromy R, Raz A, Metzker A (1991) Infantile acropustulosis. *Pediatr Dermatol* 8: 284-287.
15. Ghosh S (2015) Neonatal pustular dermatosis: an overview. *Indian J Dermatol* 60: 211.
16. DeLeon SD, Melson SC, Yates AB (2015) Crawling Toward a Diagnosis: Vesicles and Thrombocytopenia in a Neonate. *Hosp Pediatr* 5: 555-557.
17. Truong AL, Esterly NB (1997) Atypical acropustulosis in infancy. *Int J Dermatol* 36: 688-691.
18. Silverberg NB (2015) Infantile Acropustulosis. Silverberg NB, Durán-McKinster C, Tay YK, eds. *Pediatric Skin of Color*. Springer 4: 323-325.

Copyright: ©2024 Mohammed Abdul Qader Almalmi. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.