

## Eruptive Pseudoangiomatosis Induced by Mosquito Bites in an Infant

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### Introduction

Eruptive pseudoangiomatosis (EP) is a rare, benign, spontaneously regressing exanthema characterized by an eruption of distinctive erythematous angioma-like papules that are often surrounded by a pale halo, as in other cases with facial localization [1]. Unlike an angioma, however, vascular ectasia without vascular proliferation is found at histology [2].

The etiopathological mechanism of EP remains unclear, but it seems to be correlated to viral infections such as echovirus, coxsackie, and adenovirus. EP can also appear a few minutes after insect bites, in particular mosquito or flea bites, and is also referred to as *erythema punctatum Higuchi* or *purpura pulicosa*. Mosquito bite reactions differ from one person to another, and this difference depends on the intensity of the immediate and delayed reactions in each individual. In this respect, repeated exposure to mosquito bites alters the bite reactions in humans. If the EP is a mosquito bite reaction, it should correspond to a stage V reaction (no immediate or delayed reaction) [1,3].

Differential diagnosis includes multiple eruptive capillary hemangiomas, all drug eruptions, and adrenergic urticaria. In

addition, dermoscopy could be a useful tool for differential diagnosis with other common vascular lesions. Multiple eruptive capillary hemangiomas are characterized dermoscopically by reddish, well-demarcated, round or oval areas called *lagoons* or *vascular lacunae*. Pigmented purpuric dermatosis is typically characterized by a coppery red background, round-to-oval dots, gray dots, and a network of brownish-to-gray interconnected lines; 4 specific patterns of pigmented purpuric dermatosis have been reported in the literature.

Pyogenic granuloma, on the other hand, presents a reddish homogeneous area, white collarette, or white rail lines (even more so when associated together). Moreover, the onset of pyogenic granuloma is usually preceded by traumas or infections [4].

### Case Presentation

A 2-month-old infant, during hospitalization for poor weight gain, was referred to our observation with a 1-day history of scattered bright red papular lesions on his right cheek, forehead, and eyelid, which disappeared at diascopy. The mother reported a mosquito bite a few minutes before the appearance

of the lesions (Figure 1A). Prodromal symptoms such as fever, cough, vomiting, and diarrhea, suggestive of viral infection, were absent. Laboratory and instrumental findings excluded any infection or other diseases.

Dermoscopy (Delta 20; Heine, Herrsching, Germany) demonstrated an unspecific pattern characterized by an unfocused, enlarged vascular network on a reddish background but without a pale halo (Figure 1B). The kind and distribution of the lesions in an exposed body area, the seasonality and the anamnestic data of an insect bite, suggested the diagnosis of EP, unusual for the absence of the typical anemic halo. Because of this strong clinical suspicion, the patient's young age, and the asymptomatic nature of the lesions, histopathological examination was not performed; at the follow-up visit 15 days later, the cutaneous lesions had spontaneously resolved.

## Conclusions

The sudden appearance of asymptomatic red papules in an infant or child,



**Figure 1.** (A) A few bright red papules spread on the face, which completely disappeared at diascopy. (B) Dermoscopy shows diffuse telangiectasia and a few hemorrhages on a reddish background ( $\times 20$ ).

with a pale halo (or without on the face) during the summer season and in exposed areas, should suggest the diagnosis of EP caused by an insect bite. Recognition of this entity is important, since it resolves spontaneously in about 3 weeks and does not require any further investigation or treatment [3].

## References

1. Oka K, Ohtaki N, Kasai S, Takayama K, Yokozeki H. Two cases of eruptive pseu-

doangiomas induced by mosquito bites. *J Dermatol.* 2012;39(3):301-305.

2. Neri I, Patrizi A, Guerrini V, Ricci G, Cevenini R. Eruptive pseudoangiomas. *Br J Dermatol.* 2000;143(2):435-438.

3. Restano L, Cavalli R, Colonna C, Cambiagli S, Alessi E, Caputo R. Eruptive pseudoangiomas caused by an insect bite. *J Am Acad Dermatol.* 2005;52(1):174-175.

4. Piccolo V, Russo T, Moscarella E, Brancaccio G, Alfano R, Argenziano G. Dermoscopy of vascular lesions. *Dermatol Clin.* 2018;36(4):389-395.