

Atypical Presentation Of Infantile Nodular Scabies With Linear Excoriations

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Case report

We used to deal with scabies of traditional presentation, with polymorphic eczematous lesions, dotted excoriations, and burrows on typical sites. Unlike classical scabies, in nodular scabies [NS] the nodules are atypically localized, which further complicates the clinical diagnosis. Several published papers describe cases of misdiagnosed nodular scabies as xanthogranuloma, leukemia cutis, skin metastases, lymphomatoid papulosis, multiple insect bites, urticaria pigmentosa, where even Darier's sign was positive. [1-3]

In the literature, nodular scabies is established as a clinical diagnosis regardless of the presence or absence of mites in the nodules, which is confusing. The cause of nodule formation is considered to be a hypersensitivity reaction to the parasite, as mites are rarely found. However, an increasing number of papers show the presence of mites in nodular lesions of scabies. Therefore, this article attempts to clarify the significance and differences between the nodules that appear in scabies.

We present a one-year-old girl, who came because of disseminated nodules and very intense itching of the skin throughout the day, which occurred 20 days before coming to the Dermatologist. The mother denied itching and any skin changes among the other family members. Girl was treated as insect bite reaction with systemic antihistamines and topical corticosteroid ointments, without improvement.

The clinical finding and dermoscopy are shown in Figure 1.

The patient was treated with 5% Sulphur ointment with good response.



Figure 1: Nodular scabies, clinical presentation. [a] nodules on the right axilla; [b] linear excoriations; on the thigh [c] nodules on the abdomen and [g] on the dorsum of the hand; [d] sparing the soles of the feet; [f] a few nodules on the back. [1,2,3] Dermoscopy (contact, non-polarized) shows mites as typical small brown pigmented triangular structures - hang-glider sign (arrows), at the beginning of white, linear and S-shaped burrows - jet-linear sign, that are filled with eggs and scybalas - string of pearls sign

In scabies, nodules can be present from the very beginning of the infestation as well as after healing [post-scabietic nodules].

Because of the identical clinical presentation, it is necessary to know how to distinguish them, due to their completely different treatment Table 1.

Nodular scabies is more common in infants, where thinner skin and its greater reactivity are considered to be important for the development of nodules from the onset of infestation.⁴ Another hypothesis is a dermal penetration of the mite, leading to a nodular inflammatory reaction. [4]

Insights of Clinical and Medical Images

Nodular scabies represents active infection as the mite is present in almost each nodule. [5] Contrary to skin scraping, which is often false-negative due to the small number of mites, dermoscopy enables the rapid detection of mites with a very low number of false-negative results. Nodular scabies is successfully treating with traditional therapy [permethrin], achieving a complete cure with a similar time to the classic form.

Table 1. The main differences between nodular scabies and post-scabietic nodules

	Nodular scabies	Post-scabietic nodules
Meaning	active infestation	hypersensitivity reaction
Clinical presentation	red-brown nodules	
The onset	from the beginning of the infestation	after the infestation is cured
More common	in infants(≤ 2 years)	in adults
Localization	axilla, palms, soles	axilla, genitals, gluteus
Dermoscopy	the presence of mite	the absence of mite
Treatment	anti-scabietic therapy	anti-inflammatory therapy

Post-scabietic nodules are more common in adults, and represent delayed hypersensitivity reaction to the female mite, its eggs and scybalas in the subcorneal burrows. [5] Persistent pruritic nodules appear in prolonged course of scabies, that may remain even after successful treatment of the infestation. They have a typical localization, without mites inside them, which are successfully treated with anti-inflammatory therapy.

In conclusion, we suggest that scabies should be considered in all patients with monomorphic nodules. Dermoscopic examination of nodules enables the differentiation of scabies from the other nodular dermatoses as well as differentiation of nodular scabies from persistent post-scabietic nodules, which is extremely important for choosing the right therapy.

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