

## IMAGES IN CLINICAL PRACTICE

### CRUSTING AND HYPERKERATOSIS IN AN INFANT

Rajesh Kumar Meena<sup>1</sup>, Sanghamitra Ray<sup>2</sup>, Prakash Chand Jain<sup>2</sup>

<sup>1</sup>Department of Pediatrics, North DMC Medical College, Hindurao Hospital, New Delhi, India,

<sup>2</sup>Department of Pediatrics, Dr BSA Medical College and Hospital, New Delhi, India

#### KEYWORDS

Foreign body aspiration, pica

#### ARTICLE HISTORY

Received 15 January 2018

Accepted 1 July 2018

A 5 months old female infant presented with generalized rash over the body. She was born of normal vaginal delivery with uneventful antenatal and post-natal period. She was exclusively breast fed and did not suffer from any previous medical illness. Both parents were illiterate and from a lower socio-economic status and had very poor hygiene. On evaluation pleomorphic rash all over the body consisting of macule, papule and vesicular rash with severe crusting and hyperkeratosis was seen (Fig 1). Routine investigations of the baby were mostly unremarkable except for slightly raised leucocyte count with eosinophilia. Mother had tested negative for syphilis and HIV during antenatal period.

*What is the diagnosis?*

**Figure 1.** Crusting and hyperkeratosis over the cheek



Due to atypical presentation, initially we had kept the differential diagnosis of infantile seborrheic dermatitis, impetigo and eczema and even psoriasis. But on follow up, itchy lesion on mother's hand were noticed incidentally and subsequently the diagnosis was made from skin scrapings which revealed scabies egg and mite fecal matter, confirming the diagnosis of Norwegian scabies.

Human scabies is a parasitic infestation caused by the mite *Sarcoptes scabiei* var *hominis*. (1) It induces a marked itching which is mainly nocturnal in typical areas of the body such as flexors folds, cubital margins, axillae, around nipples, navel, external genital organs. Norwegian scabies also called crusted scabies is a rare

manifestation of this common parasitic infestation. This is a highly contagious form of scabies due to very high parasitic load. It occurs as a result of the failure of the host immune response (2) or lack of scratching response (3) that helps to remove mites and destroys the burrows. The diagnosis of scabies can be made easily clinically with history and examination alone. But in atypical cases, as in the index case, microscopic evidence of scabies is often necessary to confirm the clinical suspicion. (4) The most common method of diagnosis is microscopic examination of the skin scrapings. (5) Thick crust and extensive scaling with hyperkeratosis are prominent in Norwegian scabies as in our patient. Permethrin is the most preferred drug for the treatment due to its wider safety profile. Patients with crusted scabies may require multiple applications of scabicides as they harbor heavy load of parasites. Though more common in geriatric age group, Norwegian scabies is rarely encountered in pediatric age group. Our patient was treated with overnight application of 5% permethrin lotion and re-application after 2 weeks along with emollients. Both the parents and the infant were treated together. Importance of personal hygiene was also reemphasized. The child is presently under regular weekly follow up and after two applications of permethrin the lesions were almost completely healed.

#### Compliance with Ethical Standards

**Funding:** None

**Conflict of Interest:** None

#### References:

1. Burkhart CG, Burkhart CN, Burkhart KM. An epidemiologic and therapeutic reassessment of scabies. *Cutis* 2000;65:233-40.
2. Roberts LJ, Huffam SE, Walton SF, Currie BJ. Crusted scabies: Clinical and immunological findings in seventy-eight patients and a review of the literature. *J Infect* 2005;50:375-81.
3. Van Der Wal VB, Van Voorst Vader PC, Mandema JM, Jonkman MF. Crusted (Norwegian) scabies in a patient with dystrophic epidermolysis bullosa. *Br J Dermatol* 1999;141:918-21.
4. Chouela E, Abeldaño A, Pellerano G, Hernández MI. Diagnosis and treatment of scabies: A practical guide. *Am J Clin Dermatol* 2002;3:9-18.
5. Singhal AK, Kushwah R, Yadav D, Jain S. A case report of neonatal scabies. *Indian J Paediatr Dermatol* 2017;18:104-6.

**CONTACT** Sanghamitra Ray (M.D. Pediatrics)

**Email :** [dr.sanghamitra.ray@gmail.com](mailto:dr.sanghamitra.ray@gmail.com)

**Address for Correspondence:** Flat No- 176, Pocket-1, Sector 1, Dwarka, New Delhi 110075.

©2018 Pediatric Oncall