

Atypical Involvement of the Palms and Soles in a Varicella Infection

Sir,

Varicella usually has a well-recognized clinical picture. One of its characteristic features is centripetal distribution, with minimal, if any, involvement of the distal aspects of the extremities (1). Unusual forms may also occur, especially in immunocompromised patients. However, involvement of the palms and soles has not previously been reported. We report here an immunocompetent child with such a clinical picture.

CASE REPORT

A 6-year-old girl presented with a history of mucocutaneous eruption lasting 6 days, accompanied by fever of 39°C. Her history revealed contact 2 weeks previously with other children at school who were suffering from varicella. The patient's medical and family histories were otherwise unremarkable and she had not been taking any drugs.

Physical examination showed fever and widespread pear-shaped vesicles containing clear fluid located on the scalp, face, trunk and back, and, in particular, on the palms and soles (Fig. 1). Examination of the mouth revealed erosions covered with prominent grey membranes involving the tongue, palate and anterior tonsillar pillars. No other mucous membranes were affected.

Significant laboratory values included white blood cells count of 6,400/mm³ (1, 600 lymphocytes, 4, 200 neutrophils), 94,000/mm³ platelets and 11 mg/dl haemoglobin. Serum electrolytes, glucose, renal and liver function test results were within normal levels.

Both Tzank smear and skin biopsy from a lesion on the forearm showed typical signs of viral infection with multinucleated giant cells containing intranuclear inclusions in the former and an intraepidermal vesicle with balloon degeneration of the epidermal cells in the latter. Varicella zoster virus DNA was demonstrated in this lesion using polymerase chain reaction (PCR) following the procedures reported elsewhere (2). The girl's mother refused a new biopsy.

Serological test of acute serum was positive for IgM varicella zoster antibody and for IgG with titres of 1,100 IU. Convalescent serum (after a 20-day period) showed IgG antibody titres of 3,400 IU and absence of IgM antibody.



Fig. 1. Pear-shaped vesicles containing clear fluid located on the palms.

Provided that the lesions had appeared 7 days before, treatment with acyclovir was rejected and the patient was given symptomatic treatment. Crusted lesions showed on the tenth day of illness except for the hands and soles, where the lesions resolved with desquamation 1 week later. One month later she was recovered and only discrete hypopigmented macules remained on her skin.

DISCUSSION

In the case described here, 3 possibilities were considered: a varicella-like erythema multiforme (3); an erythema multiforme associated to varicella infection (4); and an unusual form of varicella with involvement of the palms and soles. Serology, altogether with pathologic anatomy and DNA viral detection using PCR, confirmed infection caused by varicella, thus varicella-like erythema multiform was ruled out. However, definitive diagnosis between the other 2 options was not possible because of refusal by the patient's mother when a new biopsy of acral lesions was suggested. It is well known that physical (pressure, trauma, maceration, sun exposure, cold) or chemical agents may exacerbate or accelerate viral exanthems (5). Nevertheless, we were not able to find any of these possible agents previously involving the patient palms and soles. Immunocompromised status was also ruled out because both analytical parameters and personal and family history were not relevant to this hypothesis.

In view of the lesion characteristics, we advocate this involvement of the palms and soles as an atypical location of varicella itself related to previous trauma, although we have not been able to demonstrate this.

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