

WIDESPREAD NONINFLAMMATORY VESICLES IN A FEMALE PATIENT: MILIARIA CRYSTALLINA

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SUMMARY: *Miliaria crystallina* is characterized by intra-or subcorneal shiny, noninflammatory vesicles of 1-2 mm diameter. In this case report, we present a patient with miliaria crystallina who had been under treatment for thrombotic thrombocytopenic purpura.

Key Words: *Miliaria Crystallina, Miliaria, Sweat Gland Diseases.*

INTRODUCTION

Miliaria results from the obstruction of sweat canaliculi which deliver sweat to the skin surface. Depending on the level of obstruction and on the clinical picture, various forms of the condition are called as miliaria crystallina, miliaria rubra, miliaria pustulosa or miliaria profunda. Miliaria crystallina is characterized by intra or subcorneal shiny, noninflammatory vesicles of 1-2 mm in diameter. In miliaria rubra and miliaria profunda, obstruction of the sweat canaliculi is in the lower part of epidermis or the upper part of dermis, and these conditions are clinically seen as erythematous papular lesions. Miliaria pustulosa is the pustular form of miliaria rubra.

CASE REPORT

A 39-year-old female patient was investigated for the widespread vesicular lesions over her trunk that appeared one day earlier. She was under treatment as an inpatient for thrombotic thrombocytopenic purpura for the last three weeks. The patient had been receiving daily

plasmapheresis, oral methylprednisolone (200 mg/day) and various oral antibiotics (including Ofloxacin, Meropenem Trihydrate and Cefoxitin). Fever up to 39°C for three days was recorded. She stated that no previous history of a similar complaint existed.

On dermatological examination there were numerous noninflammatory vesicular lesions at the inframammary and abdominal regions and on the extremities. These lesions were superficial, transparent and of a few millimeters in diameter (Fig. 1). Oral and genital mucosa were normal. The hair, scalp and nails were normal in appearance.

Laboratory findings were as follows: Hb; 7.7 g/dl, Hct; 22.8%, RBC; 2.3×10^6 /ml, ESR; 70 mm/hr, Leukocytes; 7,600 /ml, platelets; 500 /ml, ASO titer; 200 IU-ML, CRP; 16 IU-ML, RF and Brucella agglutination were negative, and urine culture grew 100,000 colonies of Staphylococcus coagulase (-).

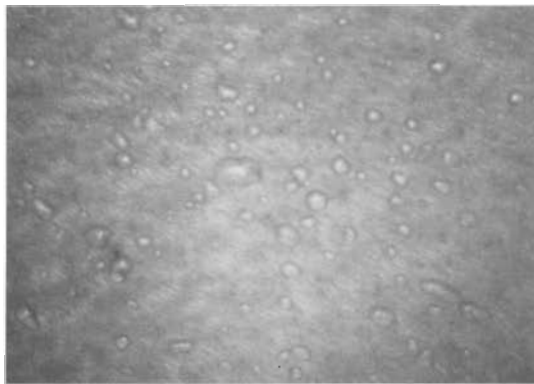


Fig. 1: Miliaria crystallina. Shiny and non-inflammatory vesicles.



Fig. 2: Histopathological view. Intracorneal vesicle (HE x 40).

A skin biopsy for histopathological examination was taken from a vesicular lesion. Histopathological findings and the clinical course of the disease showed intracorneal vesicles (Fig. 2). The patient was diagnosed to have miliaria crystallina. She was advised to bathe frequently. On subsequent examinations, rupture and desquamation of the vesicles were observed.

DISCUSSION

Miliaria typically develops in the course of a febrile illness or after excessive sweating in a hot, humid climate, in bed-ridden patients who lay in

the same position for prolonged period of time, on skin under closed dressings with polyethylene films, and in newborn babies due to immaturity of sweat glands (1). Betanecol and systemic isotretinoin therapy can iatrogenically cause miliaria (2,3). The disease can occur with manganese deficiency (4). Congenital cases of the disease have also been reported in the literature (5,6). The widespread miliaria crystallina in our case is associated with excessive sweating as a result of high fever.

Histopathological examination of this condition shows vesicles located in the stratum corneum or immediately under it with neutrophilic infiltration surrounding the vesicles. Spongiosis, papillary dermal edema and scattered superficial perivascular inflammation can also be seen (1). Histopathological findings of our case were in accordance with miliaria crystallina. We have found this case worthwhile to report due to its feature of demonstrating the widespread miliaria crystallina.

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