Miliaria crystallina: relevance in patients with hemato-oncological febrile neutropenia

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DESCRIPTION

We present two cases of febrile neutropenia (FN) with miliaria crystallina. The first patient, a 33-year-old man with pre-B acute lymphoid leukaemia (ALL) was admitted for FN postconsolidation with high-dose methotrexate (ANC-282/ μ L) on empirical antibiotics. He developed a clear fluid-filled vesicular rash appearing as water droplets (figure 1) following high-grade fever (104°F). The second patient, an 18-year-old man, also a case of ALL, was admitted with bronchopneumonia, diarrhoea and FN (ANC-184/ μ L) with hypernatremia following induction chemotherapy (BFM-90 protocol). He developed sand crystal-like lesions over the face and upper chest subsequent to fever of 105°F (figure 2). Tzank/fungal/bacterial smears from the lesions were normal in both patients. Skin lesions were diagnosed as miliaria crystallina. These lesions resolved within 72 h of subsidence of fever, with supportive therapy.

Miliaria crystallina is a self-limiting eccrine gland disorder due to blockage of sweat glands presenting as fluid-filled vesicles that easily break.¹ It occurs mostly in tropical regions secondary to heat and humidity, and is predisposed by high-grade fever, hypernatremia and neutropenia.² Biopsy is unnecessary, as the characteristic rash is self-defining. Patients are asymptomatic and lesions resolve spontaneously by keeping the affected area cool and dry.³

The differential for fever and rash in a patient with neutropenia is broad and requires an extensive microbiological/radiological work up given the high

Figure 2 Sand crystal-like rash of miliaria crystallina over the forehead.

morbidity and mortality. Evaluation of skin may therefore provide a quicker diagnosis. We present this case to emphasise that miliaria crystallina is a benign self-remitting disorder that does not warrant extensive evaluation/high doses of antibiotics.

Learning points

- ▶ Early diagnosis of this common entity in hemato-oncological patients in the tropics can avoid unnecessary investigations and therapy.
- ▶ Lesions resolve with mere supportive care, such as controlling the room temperature, and keeping the affected area cool and dry.

Contributors All the authors were actively involved in managing the cases. UY and AK prepared the manuscript.

Competing interests None declared.

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Figure 1 Miliaria crystallina (appearing as water droplets) on the neck.

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