

*****no patient handout*****

Miliaria crystallina - Skin in Adult

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Synopsis

☒☒ Miliaria is caused by occlusion of the eccrine sweat ducts. There are various clinical patterns of miliaria depending on the level of occlusion.

Miliaria crystallina results from blockage of the eccrine sweat duct in the stratum corneum, corresponding to the formation of asymptomatic pinpoint, fragile vesicles. Miliaria crystallina is most common in neonates, but is seen in adults in the setting of bedridden patients with high fever and excessive sweating. The use of occlusive products prior to exercise may induce this as well. It is also more common in tropical climates.

When the occlusion of the sweat duct is deeper in the epidermis, **miliaria rubra** (prickly heat), **miliaria pustulosa**, or miliaria profunda may result.

Codes

ICD10CM:

L74.1 – Miliaria crystallina

SNOMEDCT:

44279002 – Miliaria crystallina

Look For

Presents with tiny, clear, superficial, non-inflammatory vesicles that are 1-2 mm in diameter (occasionally larger). The vesicles are fragile and do not persist. They may become confluent, and they most commonly involve areas occluded by clothing or bedding. After the vesicles rupture, they may leave behind areas of fine desquamation.

Diagnostic Pearls

Vesicles are very fragile and rupture easily. Lesions are most prominent in areas occluded by bedding or clothing (eg, the back in bedridden patients).

Patients will often have a history of a recent high fever or a visit/move to a tropical climate.

Differential Diagnosis & Pitfalls

- **Varicella**– Presents with vesicles on an erythematous base (eg, "dewdrops on a rose petal") and with lesions in different stages.
- **Folliculitis** – Has follicular-based pustules.

- **Herpes simplex** – Presents with painful crops of vesicles that often occur near a mucosal surface.
- **Acute generalized exanthematous pustulosis (AGEP)** – Pustules are opaque, not clear as in miliaria.
- Lesions may resemble **toxic epidermal necrolysis** with the presence of desquamation. However, miliaria crystallina does not have the intense erythema, mucosal involvement, or systemic illness associated with toxic epidermal necrolysis.
- **Vesicular drug eruption**

Best Tests

A skin biopsy will confirm the diagnosis but is usually not necessary based on the clinical scenario and exam.

If there is concern for infection, a culture may be performed.

Management Pearls

Treat any underlying causes of fever, and avoid occlusive clothing or products. Keep the patient in a cool environment; provide air conditioning, if possible.

Therapy

Miliaria crystallina is usually asymptomatic and self-limited; treatment is usually not required.

Cool baths or showers may enhance patient comfort. Encourage patients to wear loose-fitting clothing and expose the involved skin to the air, if possible. Antipyretics (eg, Tylenol) can help control fever and prevent subsequent miliaria formation. Patients should avoid heavy emollients, as they may exacerbate the problem.

Drug Reaction Data

Below is a list of drugs with literature evidence indicating an adverse association with this diagnosis. The list is continually updated through ongoing research and new medication approvals. Click on Citations to sort by number of citations or click on Medication to sort the medications alphabetically.

Medication	Citations
Antineoplastic antibiotic	2
bethanechol	1

Medication	Citations
doxorubicin	<u>1</u>
idarubicin	<u>1</u>
Isotretinoin	<u>1</u>
Retinoid	<u>1</u>