

SPOT DIAGNOSIS (IMAGE GALLERY)



NEONATAL SKIN LESIONS

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Case 1: A 22-year old mother delivered a male baby at the 40th week of gestation by cesarean delivery. The physical examination at postnatal seven days revealed the vesicular and pustular skin eruptions located on the infant's neck, trunk and extremities {Fig. 1A}.

Case 2: A 27-year old mother delivered a female baby at the 38th week of gestation by vaginal delivery. The physical examination at postnatal five days showed 1-3 mm waterdrop-like vesicles located on the infant's trunk, arms and legs {Fig. 1B}.

In both cases, it was reported that the room temperature was too high and the infants were wrapped with thick clothes. The lesions were resolved within a few days by keeping the room temperature at normal levels, having frequent warm baths, and wrapping the infants with thinner clothes.

What is the diagnosis?

Miliaria pustulosa and crystalline respectively. Miliaria is thought to be caused by blockage of the sweat ducts, which results in the leakage of eccrine sweat into the epidermis or dermis. {1,2} The miliaria are classified according to the level at which obstruction of the sweat duct occurs; miliaria crystallina, rubra, profunda, pustulosa. {1} The miliaria rubra {also known as heat rash} is better known than the other subtypes by the pediatricians and neonatologists. If the ductal obstruction occurs in the stratum corneum or below this level, the lesions are called as miliaria crystalline or sudamina. The obstruction within the epidermis is named as the miliaria rubra; and at the dermal-epidermal junction is called as the miliaria profunda. When pustules are developed on the lesions of miliaria rubra, the term of "miliaria pustulosa" is used. {1,2} As miliaria is widely seen at hot, humid and tropical climates, it is important to wash the baby with warm water and keep the skin of the baby cool during the hot weather. {3} It is very important to be cautious against the development of secondary bacterial infection. {4}

References

1. Champion RH. Disorders of sweat glands. In: Champion RH, Burton JL, Burns DA, Breathnach SM, ed. Textbook of Dermatology. 6th ed. Malden, Mass: Blackwell Scientific Publications; pp. 1998:1997-1999.
2. Wenzel FG, Horn TD. Nonneoplastic disorders of the eccrine glands. J Am Acad Dermatol 1998; 38:1-17
3. Engür D, Türkmen MK, Savk E. Widespread miliaria crystallina in a newborn with hypernatremic dehydration. Pediatr Dermatol 2012. doi: 10.1111/ pde.12055. {Epub ahead of print}
4. Antaya RJ, Robinson DM. Blisters and pustules in the newborn. Pediatr Ann 2010; 39: 635-645.

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