PAEDIATRIC DERMATOLOGY

NONGENETIC NEONATAL RASHES AND BLISTERS

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In the neonatal vulnerable patient population, vesiculopustular skin eruptions can be alarming. A stepwise approach of these patients is critical for precise diagnosis and appropriate treatment.
A thorough clinical history and examination are essential to assess the possible seriousness of the eruption: what is the past medical history of the mother? is the child in good general condition? are the lesions generalized or localized? is the child febrile? Usually, in the afebrile neonate, the skin eruption presents before 15 days of life and is more frequently vesicular than pustular. If pustular, it can be managed with a skin lesion scraping direct examination, culture, topical antibiotic and observation while the results are pending.
Vesicular lesions require a Herpes PCR and acyclovir while awaiting the results. In a febrile neonate, bacterial, viral and fungal cultures as well as direct exams with Gram stain, KOH, Tzanck smears and PCR and a skin biopsy should be performed. Treatment should be initiated immediately.
Common benign causes, such as toxic erythema of neonate and neonatal pustular melanosis, as well as serious viral, fungal and bacterial infections, including congenital syphilis, will be discussed. Congenital syphilis is reported on the rise in many countries, including Canada and United States.
Neonatal erythroderma may herald a primary immunodeficiency disorder, neonatal psoriasis or atopic dermatitis or severe cutaneous infections. Neonatal Behçet disease, tumoral processes such as Langerhans cell histiocytosis or congenital erosive and vesicular dermatosis should be considered with ulcerative lesions while an annular morphology can point to neonatal lupus or tinea corporis.