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## 50 Years Ago in THE JOURNAL OF PEDIATRICS

### The Newborn Skin

Solomon LM, Esterly NB. Neonatal Dermatology. I. The Newborn Skin. *J Pediatr* 1970;77:888-94.

**O**ur knowledge about the skin of neonates has clearly increased in the past 50 years. Since the description by Solomon and Esterly of the structure of skin, many discoveries have been made. For instance, we now know that human skin has 3 layers instead of 2, we have better detailed knowledge of the structure of the epidermis, and the functions of its cells (eg, the Langerhans cells as antigen-presenting cells, among others). Thanks to technological advances, we are able to understand the dynamics of the lymphatic vascular system, which play an important role in regulation of interstitial fluid pressure and removal of excess extracellular fluid.<sup>1</sup>

Solomon and Esterly reported that the removal of the vernix was followed by desquamation of the epidermis in the majority of infants, probably secondary to transepidermal water loss. Today, vernix retention, when compared with vernix removal immediately after birth, leads to significantly higher amounts of skin hydration 24 hours after birth and lower skin pH, suggesting that the vernix assists in acid mantle development.<sup>2</sup> These findings support the practice of vernix retention for at least 6 hours after birth. In contrast, little has changed about ephemeral cutaneous lesions. The observations made about the common benign pathologies in the newborn skin (eg, the Mongolian spot, salmon patches, erythema toxicum, miliaria, and acne neonatorum) are still current, and a conservative treatment still is recommended.

The conception that the skin not only has a coating function in the newborn, but that it also functions as a barrier to water loss, infection control, thermoregulation, and acid mantle formation (a concept that was already brewing 50 years ago) has led to a better understanding of an amazing organ and its transition from intrauterine to extrauterine life.

**Leticia Lara-Mendoza, MD**  
Pediatric Dermatology  
Matehuala, SLP, Mexico

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