Summary

The development of the human skin from intrauterine to extrauterine life is a balletic interplay of maturing layers and interlocking structures. The epidermis is established in utero and replenished from a pool of stem cells which give rise to interfollicular epidermis, hair follicles, sebaceous and sweat glands.

The stratum corneum of the premature neonate is thinner and markedly less effective than that of full term. These premature neonates therefore have a dysfunctional epidermal barrier and experience difficulties with fluid homeostasis, thermoregulation and infection control.

The skin offers protection from a fluid and electrolytes imbalance, infection and temperature instability so disruption in neonatal skin integrity and function can cause significant adverse consequences for the infant.

Skin lesions in neonates may be presented as papules, plaques, patches, pustules, vesicles, bullae, erosions or ulcerations. Papular and vesiculopustular lesions are the most common presentations which can be the presenting feature for diaper rash, infectious and most of the transient neonatal disorders. Bullae, erosions and ulcerations caused by several disorders as staphylococcal scalded skin syndrome, epidermolysis bullosa, bullous forms of ichthyosis, herpes simplex virus, aplasia cutis congenita and several less common conditions. Other distinct categories of neonatal skin lesions include pigmented (i.e., melanocytic nevus,
Mongolian spots, nevus of Ota and café au lait macules), vascular (i.e., infantile hemangioma, port wine stain) birthmarks and those presenting with erythema and scaling.

Postnatal age and gestational age are important considerations in assessing skin maturity and in determining skin care practices. Premature infants suffer from significant morbidity and mortality, especially during the first week of life, when approximately two thirds of neonatal deaths occur.

The proper care and hygiene of the normal mature neonatal skin are achieved by optimizing epidermal barrier integrity, including bathing and emolliation practices, preventing and managing infections and skin injury, and minimizing transepidermal water loss and heat or percutaneous absorption of toxins with particular reference to preterm infants born at less than 37 weeks gestational age and hospitalized neonates who require intensive care.

In conclusion, we tried to evaluate the prevalence of skin lesions during the neonatal period and to determine any correlations with gender and gestational age. Several skin lesions, physiologic or pathologic, are present at birth and a number of others appear during the neonatal period. It was very important to differentiate the physiologic skin lesions from the pathologic ones. There are many studies with different methods about neonatal dermatoses in the literature from various countries. The frequency of these lesions might have changed due to racial and environmental factors.