The aim of this leaflet

This leaflet is designed to help you understand more about transient neonatal (or newborn) dermatosis. It discussed the most common benign conditions seen in newborns and what it looks like, what can be done, answers to common questions, and practical advice for managing this condition.
What is transient dermatosis in newborns?
During the first 30 days of life, newborn skin shows many physiologic (normal) changes. These temporary conditions (due to the skin adaptation to the new dry environment, the variability of the temperature, and the progressive maturation of the skin) are important to recognize. Not only can you as parents be reassured, but also expensive, unnecessary, and inaccurate evaluations and treatments of presumed serious diseases can be avoided.

Who is affected by the disease?
Vernix caseosa (a white protective coating on the skin) is generally still present on the skin of preterm and term newborns. It is almost absent in post-term neonates (born at 42 weeks and beyond).

- *Transient pustular melanosis* (a rash) is more common in dark phototypes (dark skin).
- *Mongolian spots* (blue-gray spots) are very common in African-American newborns (up to 80%), common in Asians (40-60%), and less common in Caucasians (10%).
- *Erythema toxicum neonatorum* (reddish patches) is virtually absent in preterm newborns.

How are these conditions categorized?
These transient conditions are classified by their presence (or not) at birth. Those present at birth include: *vernix caseosa*, vascular changes (*physiologic cutis marmorata* [net-like mottling of the skin]), “Harlequin” phenomenon [colour change], *papular/pustular* eruptions or small inflammatory lesions (mainly smaller lesions on the nose/cheeks with *milia* and *sebaceous gland hyperplasia* and on the palate with Epstein pearls, and generalized lesions with *transient pustular melanosis*), “sucking blister” (on hand from sucking during pregnancy), *mongolian spots*, and “salmon patches” (pink/red birthmarks). Conditions that are not present at birth include *erythema toxicum* of the newborn (a general eruption), vaginal discharge, and breast enlargement.

What do these conditions look like?

**Vernix caseosa**
Whitish, sticky, waxy substance coating the skin of newborn babies.

**Physiologic cutis marmorata**
A common, benign reticular (net-like) mottling of the skin that is due to physiologic enlargement of capillaries and small veins in response to cold.
“Harlequin” colour change
A well-defined colour change, with part of the body displaying redness and the other part pallor (paleness). This change fades away in seconds or minutes.

Milia
Tiny, whitish scattered papules (small lesions) that typically appear on the nose and cheeks. These cysts occur when keratin (a tough protein produced by your cells) becomes trapped beneath the skin.

Sebaceous gland hyperplasia
Yellowish, grouped, small papules on the nose and cheeks that are a natural response to the maternal hormones of pregnancy.

Transient pustular melanosis
Mainly seen in darker skin, superficial pustules rupture easily with a remaining characteristic “collarette” of scale (scaly outer edges of lesions as they begin to clear) and brown hyperpigmented macules (dark flat lesions) that may persist for weeks or months.
TRANSIENT NEONATAL DERMATOSIS

“Sucking blister”
These erosions (missing patches of skin), a result of vigorous sucking during fetal life, are typically located on the outer aspect of hands and resolve without specific treatment within days to weeks.

“Salmon patches”
These are flat patches of pink or red skin with poorly defined borders, commonly found at the nape of the neck (“stork bite”), on the mid-forehead (“angel’s kiss”), or on the eyelids. They become more noticeable when the child is crying. Most lesions will disappear within the first year of life.

Mongolian spots
Blue-gray spots located on the lower back and buttocks, prevalent in Asian and black babies. Most lesions will fade within the first year of life.

Erythema toxicum neonatorum
Whitish-yellowish papules or pustules surrounded by an indistinct erythematous (reddened) halo. It appears in up to half of newborns, usually between days 2–5 after birth.
Erythema toxicum neonatorum
(back, reddish spots that are confluent [running together]) The “Koebner phenomenon” (appearance of confluent skin lesions in areas of trauma/friction).

Physiologic breast enlargement
Breast enlargement occurs in both male and female newborns due to the influence of maternal hormones during fetal life. It is not painful and usually occurs on both sides.

How are these conditions treated?
All these conditions are transient and uneventful, so they do not require any therapy.

What are common questions about newborn skin?
- What is normal and what is not?

Blisters:
A blister on the outer surface of the hand is common (“sucking blister”).

Many blisters in different sites are not normal (e.g. Epidermolysis bullosa [a hereditary disease], staphylococcal infection, and other bullous diseases).

Blue Patches:
Large blue-gray spots present at birth (in the sacral region but also in other sites, excluding around the eye) without associated vascular patches are normal, especially in Asian and in black babies (i.e. Mongolian spots).

Large blue-gray spots associated with vascular patches need multidisciplinary consultation as it is possibly a genetic condition (such as Phakomatosis). Small blues spots with a fast progressive onset after birth are probably a sign of a severe condition (e.g. infection or thrombocytopenia [decreased platelets]).

Pustules:
Multiple whitish pustules (pus-filled lesions) present at birth with one or more “collarette” (scaly outer edges of lesions) in a healthy newborn are quite common, mainly in blacks (i.e. transient pustular melanosis).

Multiple whitish pustules without a “collarette sign” at birth or after birth are not normal and need further evaluation (e.g. possible candidiasis [yeast] or herpes simplex infections).
**Papules:**
Whitish or yellowish small *papules* on the face at birth are normal (i.e. *milia* and *sebaceous gland hyperplasia*).

Yellowish large *papules/pustules* occurring after birth (especially if around the navel, or in frictional areas) are *not* normal and need further evaluation (e.g. *staphylococcal* infections). Acquired pruritic (itchy) papules on the back, legs, arms, head, and especially palms and soles are not normal and require further evaluation (they may be from *scabies*, itching caused by mites).

**Transient *pomphoid* eruption:**
Transient *erythematous, pomphoid* eruption with small *pustules* a few days after birth is common (i.e. *erythema toxicum neonatorum*).

Transient *pomphoid* eruption with large lesions in a sick/irritable newborn is *not* normal and needs multidisciplinary consultation (it may be *urticaria* [hives] after infection, allergic reaction to formula, or an auto-inflammatory condition such as CINCA [Chronic Infantile Neurological, Cutaneous, and Articular] Syndrome).

**Breast enlargement:**
A bilateral, “hormonal” breast enlargement without pain and fever is normal. Breast enlargement on only one side along with fever and pain is *not* normal (e.g. *staphylococcal mastitis*).

**Vascular red/rose patches:**
Symmetric (same on both sides) patches on the nape of the neck, on the front, or on the eyelids are usually temporary and very common in Caucasian babies ("salmon patches").

Asymmetric vascular patches in any location are permanent, *not* normal, and require multidisciplinary consultation (e.g. isolated or syndromic vascular malformations).

**Pale patches:**
Pale patches that change with position are transient and uneventful (i.e. “Harlequin” phenomenon).

Unchanging pale patches are *not normal* and require multidisciplinary consultation (e.g. *hemangioma precursors*, *nevus anemicus* [a possible first sign of neurofibromatosis type 1 or NF1]).

What signs should alert me that something may be going wrong?
If your newborn’s skin (in the first 30 days of life) shows something different that clinicians (i.e. doctors and nurses) did not note before, call to set up an appointment to see them. Before calling, check all other signs (e.g. fever, general conditions, urine, etc.). Clinicians need information to give you the right answer!

How can I describe to the doctor/nurse the rash that I have seen on my child?
Take a picture with your smartphone or camera. With transient, temporary lesions, a good picture is more helpful than many words.

What is practical advice for taking care of the disease?

- Keep in mind that the changes you notice in your newborn’s skin are, in most cases, a case of transient neonatal dermatosis. It is important to be aware of any other symptoms occurring with this condition, and your child’s general health history in order to discuss it with clinicians.

- However, if no one has reported it in your newborn’s personal healthcare booklet or explained it to you, do not hesitate to ask for explanations from clinicians (i.e. doctors and nurses).