



ADVICE FROM THE EXPERTS

Infant eczema: a condition that needs urgent treatment

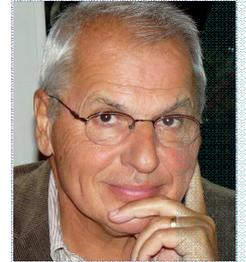


BY DR JACQUES ROBERT

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Infant eczema: a condition that needs urgent treatment

This article makes the case for the early treatment of infants at risk of eczema. An infant at risk of eczema is the child of a parent with allergies. "Early" means at the first sign of dryness. The skin must be generously "greased" and as soon as inflammation occurs, a corticosteroid must be applied.



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1. Diagnosing eczema in infants is easy

- ✓ 15 to 20% of babies are born with dry skin. At the age of two months, this dryness is easily perceptible on the cheeks, which feel slightly "rough" to the touch. This dryness is known as xerosis, and there are many emollient products whose names begin with "Xer," referring to this condition.
- ✓ It is not long before areas of the skin become red, inflamed and itchy. These are the key areas where dermatitis occurs and is likely to recur: the cheeks, around the mouth, the skin behind the ears and the back of the hands.
- ✓ Sometimes, members of the family (father, mother, siblings) suffer from an allergic condition. In such cases, the infant can inherit this allergic background, known as atopy. This explains why the condition is referred to as atopic dermatitis (AD) or atopic eczema. Those who have an atopic skin condition are more prone to developing food allergies, asthma, etc. This is why it is so important to take care of the skin as early as possible.
- ✓ So eczema = xerosis + inflammatory lesions + pruritus



Xerosis on the cheeks, age 3 months

2. How was it possible to measure dry skin at risk of eczema in babies?

- ✓ By measuring the loss of water through the skin (transepidermal measurement) on newborns at two days, then again at two months, using a non-invasive, pain-free method. The skin's barrier function is in fact measured.
- ✓ 1,903 newborns were included in the study and monitored for one year.
- ✓ At the age of 12 months, 15.53% had atopic dermatitis. This had been predicted when they were two days old and affirmed again at the age of two months (supported by a statistical study); *Kelleher M et al. J Allergy Clin Immunol 2015, 135 (4)*.



A device to measure transepidermal water loss

3. The main benefits of early treatment

Treating xerosis early prevents the occurrence of eczema in half of cases. There have been various publications on this subject, including a recent study. In this study, 124 newborns, with a family history of allergies, were selected at two sites (USA and UK). These newborns were considered at risk of developing an atopic condition, such as eczema. Starting from the maternity ward, the parents of all these newborns were given hygiene advice regarding the use of non-detergent soaps, the temperature of bath water and bedrooms, etc. However, this was a scientific study (prospective, randomized, with two treatment regimens): one group of infants would be treated with an emollient, applied all over the body at least once a day, every day, for six months. The other group would not be given this treatment. The results showed a 50% reduction in the incidence of atopic dermatitis in the “greased” group, compared with the control group. *E.L. Simpson et al JACI 2014, 134 (4)*

Treating eczema early prevents chronicity (“Doctor, I can’t keep on top of it”) and reduces the likelihood of developing other allergic conditions. Children with severe eczema (with high clinical scores) are those who have the most food allergies, rhinitis and asthma. One of the largest cohort studies (ETAC study) of infants with eczema was published in 1998, and we took part in it. The matter of whether the subjects went on to develop a respiratory or food allergy was mainly dependent on the severity of the atopic dermatitis, i.e. the intensity of skin lesions. 40% of this group of European infants had allergic asthma. However, if we look at the evolution of a subgroup that suffered from severe dermatitis from the very beginning of the study, and with a high score (SCORAD clinical scoring system), the incidence of asthma rises to 80%. (*ETAC Study Group. Pediatr Allergy Immunol 1998; 9: 116-124.*)

Since then, numerous publications on the subject have shown that a permeable skin barrier enables chemical or organic molecules – which may be irritants or allergens – to penetrate the skin. (*J. Just et al; Pediatr Allergy Immunol 2015; 25 and I. Nemoto-Hasebe et al; J Invest Dermatol 2009;129*). Inflammation leads to the allergy and the allergy exacerbates the inflammation.

Nummular eczema is also a form of eczema that can be seen in infants, and is characterized by coin-shaped lesions. It can seem very stubborn for those who don't dare to combine corticosteroids with emollients. But it's the baby that suffers!



Nummular eczema in an infant

A reminder of the basic principles of the treatment

Many years of clinical experience and evidence-based medicine confirm the necessity of early treatment for eczema. The three-pronged therapeutic approach consists of:

- 1/ **Hygiene** (see this chapter).
- 2/ **Applying an emollient to the entire body, morning and evening.** This is the essential treatment for atopic dermatitis, as the skin barrier – a natural barrier – must be restored.
- 3/ **A sufficient amount of topical corticosteroids should be applied once a day to all lesions, until they disappear.** The earlier in life eczema is treated, the shorter the treatment will be. Don't hesitate to start a new topical treatment as soon as the eczema recurs. The only topical anti-inflammatories that are available for infants are corticosteroids.