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NEWS IN ATOPIC DERMATITIS

The world of Atopic Dermatitis is full of new findings that will directly impact patient education. New studies on filaggrin mutations will cause us to change our perspectives about bacterial colonization of the skin, since we now know that staphylococcus epidermis helps the immune system. Publications about the monitoring and development of products that repair the epidermal barrier and filaggrin mutations will steer our work in a new direction.

Research from 1985 showed that there was a defect in the synthesis of filaggrin in ichthyosis vulgaris. In cases of filaggrin deficiency, it is easier for allergens to penetrate the skin. Where there is a defect in the epidermal barrier, **filaggrin mutations** cause a reduction in the natural moisturizing factor, and allergens penetrate the skin, which has a direct impact on pH, as well as the skin's cell cohesion, permeability and inflammation. However, studies on patients with atopic dermatitis have revealed that filaggrin arrangement could reduce its mutation.

Atopic dermatitis can be triggered by exposing of the skin to percutaneous antigens. Studies on different populations, particularly Irish and Italian, have shown that filaggrin mutation did not have « the same history » everywhere in the world; epidermal function remains high and we now know that individuals with atopic dermatitis worldwide experience different evolutions and risks of atopy.

Early intervention can prevent this type of condition from developing; Rich Gallo from San Diego demonstrated that our host defense proteins are extremely important for immune defense. As proof, here is a very simple example: if you dip your hand into E. coli and then place it on a culture plate, you will have very little E. coli growth. However, if you were to cover part of your hand with a glove before dipping it into the E. coli., there would be many more E. coli cultures. Our hands therefore possess an innate defense system that protects us from bacteria.

Unfortunately, for decades our skin has developed its own immune system by harboring bacteria which strengthen its defense system but also changes it. Staphylococcus epidermis produces proteins which have a positive impact on our immune system. This interaction facilitates the reduction of the colonization of pathogenic microbes, and some studies suggest an impact on flare-ups.

Nonetheless, in terms of ecological balance, a good question would be whether MSSA colonization protects against MRSA.

In the same way, **anti-microbial products in gel or foam form**, similar to those used in hospitals, have a proven efficacy of 99.50% in destroying golden staphylococcus. Doesn't this change our resistance after a while? In our urbanized society, people have a tendency to be cleaner, but the use of antiseptics, bleach baths and other anti-microbials can alter the skin's natural barrier function making the skin more susceptible to allergens. However the

difference between the development of atopic dermatitis and the treatment of an established colonization should be highlighted without neglecting genetic problems and psychological stress.

What treatment should someone's skin be given? How should it be taken care of? There are still no definitive answers.

Creams may make up for our skin's natural protection, but are their ingredients really incorporated into the epidermis or do they simply reduce perceptible water-loss? An article compared a vaseline-based cream with a cream containing ceramides, and they both had the same efficacy.

A study of corticophobia reveals that 80% to 85% of parents are afraid to use corticosteroids; 36% admitted that they did not follow the treatment. A group of studies carried out by safety and surveillance committees the world over allowed us to analyze this fear of steroids in order to provide responses to this phobia and prove the efficacy of treatments.

We have made major scientific progress, and we have added new elements to our therapeutic methods, but a lot remains to be completed where atopic dermatitis is concerned. This conference provides a remarkable occasion for everyone share their international experiences. This is a rich source of knowledge, and we should be wise enough to draw from these experiences to determine future challenges and to guide persons with atopic dermatitis.