



ATOPIC ECZEMA/DERMATITIS

STAPHYLOCOCCUS AUREUS INFECTION AND ANTIBIOTIC RESISTANCE PROFILE IN PATIENTS WITH SEVERE ATOPIC DERMATITIS

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Backgrounds: The skin barrier dysbiosis in Atopic Dermatitis favors the colonization and skin infection by some bacteria, such as the *Staphylococcus aureus*, the main one. In patients with severe atopic dermatitis, the infection can exacerbate cutaneous inflammation. The *S. aureus* molecular expression contributes to the intensity of symptoms by: δ toxin that stimulates mast cells, α toxin that damages keratinocytes, as well as superantigens that trigger the expansion of B cells and the release of pro-inflammatory cytokines. In this context, anti staphylococcus treatment should be taken into account for the control of the disease. Systemic antibiotic therapy is often recommended and preferable to topical therapy and, in this case, knowledge of the resistance profile of *S. aureus* to the most commonly prescribed oral antibiotics in clinical practice is paramount.

Observation: We present a study developed in a Dermatology reference service, whose objective was to evaluate the prevalence of *S. aureus* infection in patients with Severe Atopic Dermatitis and the resistance profile of this bacterium to the most commonly used antibiotics such as first generation cephalosporins, tetracyclines, sulfas and penicillins. Nasal, axillary swabs and of injured skin with severe atopic dermatitis from 136 patients were studied from 2015 to 2018 and allowed a critical approach in the clinical and therapeutic evaluation of them.

Key message: Knowing the *S. aureus* resistance profile in infected atopic patients is important to direct the therapy and to reduce the inflammatory worsening of the skin resulting from the infection.

