

Medical > In Vivo > Inflammatory Disease Research

40

TOPICAL CORTICOSTEROIDS BUT NOT CALCINEURIN INHIBITORS INDUCED ATROPHY AFTER FOUR WEEKS.

Jiráková A, Rob F, Sezníková Z, Koblková K, Džambová M, Rajska L, Göpfertová D, Pellacani G, Malý M, Lotti T, Hercogová J, J Biol Regul Homeost Agents. 2015 Jul-Sep;29(3):701-6.

ABSTRACT

Reflectance confocal microscopy (RCM) is a non-invasive, in vivo technique for real-time imaging of the epidermis and superficial dermis at the cellular resolution. We performed a pilot study focusing on the evaluation of the effect of topical corticosteroids and calcineurin inhibitors on the epidermis of patients with atopic dermatitis (AD). The effect was assessed by RCM. A total of 45 patients with AD took part in the study. Patients were selected according to the standardized protocol and divided into two groups. Twenty-three patients used methylprednisolone aceponat topically on the skin with lesions of AD once a day for three months (group A). Twenty-one patients applied topical tacrolimus on the skin with lesions of AD twice a day for three months (B). RCM imaging was performed on the day of initiating the study (T0), then after one (T1), two (T2) and three months (T3). In group A, there was a visible decrease of the stratum corneum and the epidermis thickness which was statistically significant. In comparison, in group B, such changes were not noted and the differences between the groups in time course were statistically significant. In group A, an increase in the percentage of blurred keratinocytes in the stratum spinosum was also recorded, especially between the first (T0) and the second visit (T1). RCM is a useful method for evaluating the changes in epidermis due to the different topical treatment in patients with AD.