ABSTRACT

BACKGROUND: Pathophysiology of psoriasis is complex and characterized by microscopic, specific changes. In vivo reflectance confocal microscopy (RCM) provides tissue and cell morphology information in non-invasive way, generating quasi-histologic resolution. Concerning plaque psoriasis, confocal criteria have been described disclosing high agreement between RCM and conventional histology. **OBJECTIVE:** We sought to evaluate the in vivo microscopic changes in plaque psoriasis occurring during treatment with two distinct actives (aceclofenac and betamethason).

**METHODS:** A total of 32 patients with psoriasis were recruited. Two lesions from the same body area or symmetrical were evaluated at baseline and after 3-6 weeks by RCM.

**RESULTS:** Aceclofenac induced clinical improvement in 32% of patients after 3 weeks and in 76% after 6 weeks. With betamethason, at the end of the 3rd week, the 45% of patients showed improvement that increased to 81% at the end of the study. Single confocal criteria was evaluated and results underwent to statistical analysis considering the modification of the microscopical changes during the two treatments.

**CONCLUSION:** RCM followed the microscopic changes during treatment and enabled to differentiate effects of different actives. Although data are preliminary and based on a limited sample, aceclofenac seems to be effective in the treatment for psoriasis.