Reflectance confocal microscopy for plaque psoriasis therapeutic follow-up during an anti-TNF-α monoclonal antibody: an observational multicenter study.


ABSTRACT
BACKGROUND: Psoriasis is a chronic recurrent inflammatory skin disease that affects 2-3% of the world population. Biologics are relatively new systemic treatments that block molecular steps important in the pathogenesis of psoriasis. In vivo Reflectance confocal microscopy (RCM) is a non-invasive, imaging technique already reported to be useful in the evaluation of the follow-up of PP under treatment with topical actives and phototherapy. No reports on systemic treatments have been proposed in literature so far.

OBJECTIVE: The aim of this study was to evaluate the feasibility of RCM in the monitoring of microscopic response to a subcutaneous anti-TNF treatment, Adalimumab. METHODS: One target lesion with typical clinical aspect, from 48 psoriatic patients, was evaluated using RCM at baseline, after 4 and 8 weeks of treatment. RESULTS: Microscopic confocal changes were followed up during treatment. Results disclosed identification of early microscopic evidence of the anti-inflammatory activity of Adalimumab not detected at clinical examination. Confocal feature related to the effect of TNF-α on melanocytes activity has been also identified. CONCLUSION: Early detected RCM parameters related to Adalimumab activity could be used to identify an early response to the treatment. RCM seems to be able to give useful and practical information about follow-up in patients with PP under treatment with Adalimumab.