Management of clinical and subclinical actinic keratoses with histological and immunohistochemical assessments by confocal microscopy.


ABSTRACT
Reflectance confocal microscopy has been used to monitor treatment efficacy in non-melanoma skin cancer, but few studies have compared different therapies using the same confocal criteria. We compare a single score designed in previous study to evaluate confocal, histological, and immunohistochemical results obtained before and after two treatments of actinic keratosis (AK) and in field cancerisation area. Thirty volunteer male patients, aged >50-year old, with at least three clinically visible AKs on the bald scalp, were included in this study: 15 patients were submitted to 3% diclofenac therapy and 15 to 5% fluorouracil therapy. Confocal imaging was performed on a 5 × 5 cm skin area. In five patients of each group we performed cutaneous biopsies. Scaling, upper nucleated cells, and inflammatory cells showed a higher percentage reduction in field cancerisation, especially in diclofenac treatment group, while in AK inflammatory cells showed a greater percentage reduction in 5-fluorouracil treatment group. Both therapies are efficacious, but their effectiveness is different on the single parameters of the confocal, histology, immunohistochemically. © 2018 Wiley Periodicals, Inc. KEYWORDS: actinic keratosis; skin tumor; topical treatment PMID: 30207022 DOI: 10.1111/dth.12672