

Medical > In Vivo > Melanoma & Pigmented Lesion Research

144 | In vivo reflectance confocal microscopy to monitor the response of lentigo maligna to imiquimod.

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ABSTRACT

BACKGROUND: Imiquimod has been used for treating lentigo maligna (LM) in selected cases when surgery is not an appropriate option because of functional or aesthetic impairment. Reflectance confocal microscopy (RCM) is a noninvasive method that has not been validated for monitoring the treatment of LM with imiquimod.

OBJECTIVE: We sought to evaluate the use of in vivo RCM to accurately monitor the response of LM to nonsurgical treatment with topical imiquimod.

METHODS: Twenty patients with confirmed facial LM, not amenable to surgical treatment or radiation therapy, were included prospectively. Clinical evaluation was performed by dermoscopy, RCM, and histopathology. Patients applied imiquimod 5% for 8 weeks. The affected area was assessed using the previously described LM score on RCM, and target sample biopsies were performed to confirm or discard RCM findings.

RESULTS: Fifteen of the 20 patients (75%) presented histologic tumor clearance. Confocal microscopy identified 70% of these responders with no false-negative results, and when compared with histopathology, there was no significant difference in evaluating the response to imiquimod.

LIMITATIONS: The impossibility of examining the entire lesion by means of histopathology is a limitation. **CONCLUSION:** In vivo RCM evaluation was useful in accurately monitoring the response of LM to nonsurgical treatment with topical imiquimod in patients when surgery is contraindicated.