

## Medical > In Vivo > Melanoma & Pigmented Lesion Research

### 102 | **In vivo reflectance confocal microscopy for evaluating melanoma of the lip and its differential diagnoses.**

*Maher NG, Solinas A, Scolyer RA, Guitera P. Oral Surg Oral Med Oral Pathol Oral Radiol. 2017 Jan;123(1):84-94. doi: 10.1016/j.oooo.2016.08.011. Epub 2016 Aug 24.*

#### **ABSTRACT**

**OBJECTIVE:** To improve prebiopsy diagnostic accuracy and surgical management of pigmented appearing lesions on the lips, particularly melanoma, using in vivo reflectance confocal microscopy (RCM). **STUDY DESIGN:** Prospective case series over a 12-month period between 2015 and 2016. The setting was two specialist dermatology referral centers with expertise in confocal microscopy. The study population was a consecutive sample of patients with pigmentation of the lip for which the cause was uncertain clinically, whose differential diagnosis included melanoma, and who had undergone both in vivo RCM and subsequent biopsy. The outcome measures were RCM features, dermoscopy features, and histopathological diagnosis. Results were reported by descriptive analysis and correlations made between RCM features and histopathology. **RESULTS:** Eight patients were recruited for the study. In vivo RCM facilitated the targeting of small biopsies to identify two in situ oral melanoma recurrences and successfully mapped an in situ oral melanoma before wide excision. Suprabasal dendritic pagetoid cells and epidermal disarray on RCM were useful indicators for in situ melanoma of the lip. Previously described dermoscopy features for mucosal melanoma were not very helpful in diagnosing melanoma in our series. Challenges included evaluating inflamed lesions with pigment incontinence. **CONCLUSIONS:** RCM can assist in the diagnosis and management of pigmented lip lesions, but additional studies are required to further evaluate these initial observations. Copyright © 2016 Elsevier Inc. All rights reserved. PMID:27720652 DOI:10.1016/j.oooo.2016.08.011