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**Onychomatricoma has channel-like structures on in vivo reflectance confocal microscopy.**

*Sanchez M, Hu S, Miteva M, Tosti A. J Eur Acad Dermatol Venereol. 2014 Nov;28(11):1560-2. doi: 10.1111/jdv.12269. Epub 2013 Sep 24.*

### **ABSTRACT**

**BACKGROUND:** Onychomatricoma is a benign fibroepithelial nail matrix tumor that infiltrates the nail plate leading to multiple tunneled cavities lined with matrix epithelium and filled with serum. Diagnostic features of onychomatricoma on reflectance confocal microscopy (RCM) have not been previously described. **OBJECTIVE:** We sought to demonstrate the feasibility of using RCM to diagnose onychomatricoma. **METHODS:** Reflectance confocal microscopy was used to evaluate four patients with onychomatricoma before tumor excision. We evaluated the affected nail and one unaffected nail of each patient with VivaScope 1500 (Lucid Inc., Rochester, NY, USA). **RESULTS:** Reflectance confocal microscopy evaluation of onychomatricomas revealed longitudinal dark areas and bright/grey lines, forming channel like structures. The channels were outlined by bright circular lines with grey dot centers. These RCM features correlated with the pathology of the onychomatricomas within the nail plate. **LIMITATIONS:** Proximal portion of onychomatricoma was not reach by RCM. **CONCLUSIONS:** Reflectance confocal microscopy can assist in rapid and noninvasive diagnosis of onychomatricoma showing characteristic channel like structures within nail plates. © 2013 European Academy of Dermatology and Venereology. PMID:24112758 DOI:10.1111/jdv.12269