



DERMOSCOPY AND SKIN IMAGING

## ACRAL MELANOCYTIC LESIONS STUDIED THRU IN VIVO AND EX VIVO DERMOSCOPY, REFLECTANCE CONFOCAL MICROSCOPY AND HISTOLOGY

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**INTRODUCTION:** Acral lentiginous melanoma is the most frequent type of melanoma in Mexico. The need to improve the diagnostic of melanocytic lesions has led to the development of non-invasive techniques. We herein describe findings found thru in vivo and ex vivo dermoscopy, reflectance confocal microscopy and histologic examination in acral lesions of Mexican patients.

**METHODS:** A descriptive study in individuals with pigmented acral lesions was carried out. All participants underwent a clinical history, physical examination, in vivo dermoscopy and reflectance confocal microscopy.

**RESULTS:** 19 patients, 18 women and 1 man. Of the lesions, 16 were located in soles and 2 in the palms. The laterality in 14 of these cases was left. Thru in vivo dermoscopy, the predominant patterns were homogeneous and fibrillar, finding only one case with a heterogeneous or multicomponent pattern. With reflectance confocal microscopy, 18 cases were reported having an organized honeycomb in the epidermis and bright cells forming nests that respected the acrosyringium and only 1 with a disorganized honeycomb pattern with isolated bright round cells around the acrosyringium. Histopathologically, 16 cases were diagnosed as common acral nevi, 2 as proliferations of atypical melanocytes in the basal layer and 1 as invasive acral melanoma. The 2 cases diagnosed as proliferations of atypical melanocytes in the basal layer were reported in the confocal image as suggestive of nevus and both presented thru in vivo dermoscopy a dark homogeneous pattern. In 14 cases, the pattern described in both in vivo and ex vivo dermoscopy was identical.





**CONCLUSIONS:** Our results suggest that these non invasive diagnostic tools are useful aids in the classification of acral pigmented lesions. The main limitations of this research was the fact that acral skin is the thickest in the body and that the reflectance confocal microscope can reach to a depth of 200 microns.

