ABSTRACT

IMPORTANCE: Melanoma remains a challenge to diagnose, especially when appearing on the background of chronically sun-damaged skin. OBJECTIVE: To identify and quantify the reflectance confocal microscopy (RCM) features of melanoma on non-facial chronically sun-damaged skin (CSDS). METHODS: Included lesions were biopsy-proven melanomas, from anatomic site other than the face, neck, scalp and acral skin, with histopathologic finding of solar elastosis in the underlying dermis. All included lesions underwent clinical, dermoscopic and RCM imaging, obtained in a standardized fashion, prior to biopsy. All images were retrospectively analyzed by four observers. RESULTS: We identified 33 melanomas from 33 patients with 63.6% male patients and overall mean age of 72.8 years. The salient RCM features included an atypical honeycomb or disarranged epidermal pattern (81.8%), pagetoid infiltration of the epidermis by both round and/or dendritic melanocytes (100%), focal proliferation of predominantly dendritic melanocytes as sheets (78.8%), foci with non-edged papillae (84.8%), junctional thickening (60.6%), areas of irregular ring or meshwork pattern (78.8%), and underlying thickened collagen bundles (51.5%). LIMITATIONS: Retrospective study design and limited sample size. CONCLUSIONS: Non-facial CSDS melanomas share features similar to other melanoma types including pagetoid cells and non-edged papillae. The focal proliferation of dendritic pagetoid cells in sheets is similar to that seen in facial CSDS melanomas. This article is protected by copyright. All rights reserved. This article is protected by copyright. All rights reserved. KEYWORDS: confocal microscopy; melanoma; nonfacial chronically sun-damaged skin PMID: 29971811 DOI: 10.1111/cup.13318