ABSTRACT

BACKGROUND: Xeroderma pigmentosum (XP) is a rare genetic disease characterized by extreme photosensitivity, resulting in a higher incidence of cutaneous tumors. Reflectance confocal microscopy (RCM) is a noninvasive imaging method for diagnosing cutaneous lesions. OBJECTIVE: To explore the application of RCM in the follow-up of patients with XP. METHODS: Patients with XP underwent RCM for suspicious lesions from January 2010 through April 2019. Lesions with malignant RCM features were excised, and the results were compared with their histopathologic features. Benign lesions on RCM were monitored every 3 months. We recorded the confocal features that were related to malignancy and specifically to melanoma. RESULTS: A total of 61 suspicious lesions from 13 patients with XP were included. Thirty-three lesions (54%) were malignant (14 melanomas, 15 basal cell carcinomas, and 4 squamous cell carcinomas). Nonvisible papillae (OR, 11.8; 95% CI, 2.6-53.1; P = .001) and atypical cells at the dermoepidermal junction (OR, 11.7; 95% CI, 2.7-50.3; P = .001) were independent predictors of malignancy. LIMITATIONS: There were limited numbers of patients and lesions. Most cases were retrospectively included, and some did not have a histologic analysis. CONCLUSIONS: RCM is a valuable tool in the follow-up of patients with XP, reducing the need for excisions by 35%. Copyright © 2019 American Academy of Dermatology, Inc. Published by Elsevier Inc. All rights reserved.

KEYWORDS: basal cell carcinoma; digital dermoscopy; melanoma; reflectance confocal microscopy; squamous cell carcinoma; total-body photography; xeroderma pigmentosum