Enlarging melanocytic lesions with peripheral globular pattern: a dermoscopy and confocal microscopy study.


ABSTRACT
BACKGROUND: Enlarging melanocytic lesions with peripheral globular pattern (EMLPGP) are a pitfall in dermoscopy. Our aim was to evaluate the meaning of EMLPGP and to assess the use of dermoscopy and reflectance confocal microscopy (RCM) in order to improve the clinical management of this sub-type of melanocytic lesions. METHODS: A total of 135 EMLPGP were recruited and, accordingly to the dermoscopy features, were removed; later, an expert dermoscopist reviewed the lesions blinded to histology. Moreover, a sub-group of 63 lesions who underwent also to RCM, were reviewed by an expert confocalist. RESULTS: Patients had a median age of 41 years old and a female prevalence (61.5%). The main anatomic site was the trunk (86%). Histology of the 135 excised EMLPGP disclosed 116 nevi (86%; p<0.0001) and 19 melanomas (14%). On dermoscopy, statistical significance was detected for small globules that were observed in 106 cases (78.5%; p<0.0001), while globules distribution and color did not impact the diagnosis prediction, as well as age, sex or any other patient profile. Considering the RCM, atypical cytology and irregular architecture were detected in 100% of melanomas (p<0.0001). CONCLUSIONS: Our study shows that EMLPGPs are detectable in every age and can be a pitfall in especially in high risk patients with an over-excision of lesions. The presence of peripheral globules should be evaluated considering the overall dermoscopic features. RCM can contribute significantly in the management of lesions through the detection of cyto-architectural atypia. Therefore, RCM in combination with dermoscopy can optimize the reduction of harmless lesions.