

Medical > In Vivo > Melanoma & Pigmented Lesion Research

1 1 False-Negative Cases on Confocal Microscopy Examination: A Retrospective Evaluation and Critical Reappraisal.

Coco V1, Farnetani F, Cesinaro AM, Ciardo S, Argenziano G, Peris K, Pellacani G, Longo C, Dermatology. 2016 Feb 11. [Epub ahead of print]

ABSTRACT

BACKGROUND: Confocal microscopy is a second-level examination for dermoscopically equivocal melanocytic lesions. However, the number of false-negative cases on confocal microscopy and the scenarios in which confocal microscopy may fail have not been fully elucidated. OBJECTIVE: To calculate the percentage of false-negative melanomas upon reflectance confocal microscopy examination in a large series of cases. METHODS: A retrospective analysis on 201 melanomas, evaluated for dermoscopic/confocal criteria of melanoma, was carried out. RESULTS: Twenty-three melanomas out of 201 cases (11.4%) revealed a low 7-point checklist score. On confocal examination, 22 out of 23 lesions have been diagnosed correctly as melanomas. Only 1 lesion did not display melanoma features, neither upon dermoscopy nor upon confocal microscopy examination. Seven lesions out of 201 cases (3.5%) were judged as negative on confocal examination, even if 6 of them were diagnosed as melanomas by clinical and/or dermoscopic evaluation. After histopathological revision, these cases were grouped into 5 categories: (1) amelanotic melanoma (n = 1), (2) hyperkeratotic melanomas (n = 2), (3) lentiginous melanomas (n = 2), (4) melanoma with small pagetoid cells (n = 1), (5) spitzoid melanoma (n = 1). CONCLUSION: Confocal and dermoscopic examination, along with patient-related information and clinical history, can lead to an optimal patient management. © 2016 S. Karger AG, Basel. PMID: 26862920