ABSTRACT

BACKGROUND AND OBJECTIVES: The differential diagnosis between vulvar naevi and melanoma is challenging. In vivo reflectance-mode confocal microscopy (RCM) is an emerging technique that allows non-invasive high-resolution imaging of the skin and mucosa. It has recently been used for the study of vulvar melanosis and melanoma, but it has not been so far employed for the diagnosis of genital naevi. The objective of this study is to evaluate RCM features of vulvar naevi and to compare them with dermoscopical and histopathological aspects.

METHODS: Clinical, dermoscopical, in vivo RCM and histological features of six vulvar naevi were evaluated. RESULTS: The clinical and/or dermoscopical aspects were suspicious in all six cases. RCM showed a blue naevus, an atypical genital naevus, a junctional naevus and three compound naevi that were later confirmed by histological examination. In one compound naevus, RCM showed focal cytological atypia and architectural irregularity without clear features of malignancy, confirmed by histological examination. CONCLUSIONS: Reflectance-mode confocal microscopy can play a role in non-invasive diagnosis of vulvar naevi, but further broader studies are required to validate our observations.