Use of handheld reflectance confocal microscopy for in vivo diagnosis of solitary facial papules: a case series.


ABSTRACT

BACKGROUND: Reflectance Confocal Microscopy (RCM) can be useful for evaluation of solitary pink papules that are suspicious for skin cancer. RCM has been challenging to apply to curvy facial areas because of the need for attaining full contact between the skin and RCM probe. A smaller diameter handheld RCM probe has been recently introduced to clinical practice.

OBJECTIVE: To describe the utility of RCM handheld probe as a bedside adjunct for clinical diagnosis of solitary facial papules.

METHODS: This is a retrospective descriptive case series of six patients presented with a diagnostically equivocal solitary facial papule. All lesions reported were evaluated and imaged clinically, dermoscopically and with handheld RCM, followed by biopsy for histopathological analysis.

RESULTS: The series included biopsy-proven basal cell carcinomas (BCCs) (n = 2), squamous cell carcinoma (n = 1), sebaceous hyperplasia (n = 1), desmoplastic trichoepithelioma (n = 1) and compound nevus (n = 1). Handheld RCM was easy to apply to the curved facial surfaces and allowed for reaching a correct bedside diagnosis.

CONCLUSION: For clinically and dermoscopically equivocal small papules on curved facial surfaces, handheld RCM may be particularly helpful in differentiating benign lesions from skin cancer.