Non-invasive imaging techniques for early diagnosis of radiation-induced squamous cell carcinoma of the lip.


ABSTRACT
Ionizing radiation was used in the past for treatment of several benign cutaneous conditions, and particularly hemangiomas. Even though radiotherapy was generally effective, it significantly augmented the risk for malignancies, resulting in a consequent heavy decline of its use for benign conditions. However, radiation-induced neoplasia is still encountered in adult patients irradiated during childhood or adolescence. We report a case of well-differentiated squamous cell carcinoma developing on the lower lip of a 59-year-old woman who had previously undergone local radiotherapy for a hemangioma, in which the use of non-invasive imaging techniques such as in vivo reflectance confocal microscopy (RCM) and dermoscopy allowed an early diagnosis and a prompt, effective treatment. Owing to its capability of assessing microscopic features of dysplasia and neoplastic changes, RCM in combination with dermoscopy may provide an invaluable tool for early detection of malignant changes in previously irradiated cutaneous and mucosal areas. PMID: 30534839