

## Effect of narrowband UVB phototherapy on melanocytic naevi

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**Introduction:** Melanocytic naevi have been observed to undergo morphological changes following exposure to narrowband ultraviolet B (NBUVB). We aimed to analyse changes occurring in naevi exposed to NBUVB in a large cohort.

**Method:** 51 subjects referred for phototherapy had macro and dermoscopic images of prominent melanocytic naevi taken immediately prior to NBUVB treatment; after 10 exposures; after 30 exposures or at the end of the treatment course if earlier; and 3 months after discontinuing treatment.

Four dermatologists, by consensus, examined each naevi for specific clinical and dermoscopic features, at each time point. The size (area) of each naevus was determined by planimetry.

**Preliminary results:** 36 of 51 patients had complete sets of images. The most common global dermoscopic pattern in the 440 naevi examined, were reticular (50%) and globular (32%).

Following NBUVB exposure, 45% of reticular naevi displayed changes in local features with blurring or merging of lines. Increase in colour intensity and in the number of dots/globules was observed in 63% of globular naevi.

167 naevi (40%) underwent change in size following UV exposure. Of these, 54% (91/167) decreased in size, with median area reduction of 8% (0.9%-42%); whilst 46% (76/167) increased in size, with median area increase of 9% (1%-76%). The trend was for these naevi to return to their pre-treatment size after phototherapy. Of the 440 naevi reviewed, none displayed changes suspicious of malignancy.

**Conclusion:** Around half of exposed naevi undergo size/morphological changes following a course of NBUVB. Size changes tended to revert to pre-treatment values 3 months after discontinuing phototherapy.

## Dermoscopy and reflectance confocal microscopy to aid in the detection of lentigo maligna recurrence after treatment

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**Introduction:** Distinguishing between recurrence of lentigo maligna (LM) and postinflammatory hyperpigmenta-

tion after treatment may be challenging. Reflectance confocal microscopy (RCM) and dermoscopy might be of help in this clinical setting.

**Methods:** We performed dermoscopy and RCM in 7 patients that showed pigmentation in areas previously treated for LM. Previous treatments were radiotherapy (4), cryotherapy (2) and surgical excision (1). Correlation between RCM findings and histological/immunohistochemical features was evaluated.

**Results:** Two cases treated with radiotherapy exhibited blue-gray granules around hair follicle openings under dermoscopy. RCM exam correlated these structures with widespread plump cells in the upper dermis without other features suggesting recurrence of LM, definitely excluded in the biopsy. In 3 cases (2 radiotherapy, 1 surgery) dermoscopy showed irregular brown pigmentation, areas with fingerprint-like structures and focal grayish dots. In these cases RCM demonstrated widespread dendritic bright cells at basal and suprabasal layers. No evidence of LM was detected on histology, but immunohistochemistry showed positive Langerhans' cells at suprabasal layers and dendritic HMB-45-positive melanocytes at the basal layer. The two cases that had been treated with cryotherapy did not show clear-cut dermoscopic criteria for LM. However, RCM was highly suggestive of melanoma that was histologically confirmed.

**Conclusion:** RCM can be useful in the monitoring of LM after treatment. In photodamaged skin, the visualization of widespread dendritic cells in basal and suprabasal layers by RCM may mimic a recurrence of LM. These structures correlate with activated nonmalignant HMB45-positive melanocytes and Langerhans' cells and may represent a pitfall in the confocal evaluation of these lesions.

## Dermoscopy of patients with radiation-induced pigmented basal cell carcinoma

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**Introduction:** Dermoscopy is one of several non-invasive approaches that use to improve the diagnostic accuracy. It has been applied in the diagnosis of skin tumors such as Basal cell carcinoma (BCC).

**Method:** One hundred lesions from 39 patients (28 men and 11 women) were included in this study. All patients had a past history of childhood radiation therapy, primarily for treatment of tinea capitis. They presented with lesions that were morphologically highly suspicious to be pigmented BCC. Using a digital dermatoscope, all lesions were photographed and evaluated for the presence of Menzies BCC criteria and other features. All lesions were subsequently, underwent biopsy.