Coming into focus: Dermoscopy for basal cell carcinomas

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Melanoma Monday is the first Monday of May, which is Melanoma Awareness Month. There are 7 articles in this issue of the *Journal of the American Academy of Dermatology* that are devoted to melanoma. With the support of the American Academy of Dermatology, there will be many skin cancer screenings in concert with education on sun safety and tanning prevention. Patients have become educated to be concerned about pigmented lesions. Inevitably, during these melanoma skin cancer screenings, many nonmelanoma skin cancers will be discovered, including pigmented basal cell carcinomas (BCCs).

BCC is the most common malignancy in the United States, and the incidence is increasing by 4% to 8% annually, reflecting cumulative sun exposure and an aging population. BCCs are more common in Fitzpatrick skin types I and II; pigmented BCCs are more common in Fitzpatrick skin types III to VI.[1] Nodular, superficial, and infiltrating variants are commonly encountered types of BCCs; pigmented BCCs comprise only 6% of total BCC cases.[2] Nevertheless, on dermoscopic examination, almost 30% of BCCs clinically classified as nonpigmented BCC have pigmented structures.[3] Histologic subtypes of BCC include superficial, nodular, micronodular, pigmented, morpheaform (sclerosing), infiltrating, and basosquamous forms. The patched/hedgehog intracellular signaling pathway is responsible for regulating cell growth, and constitutive activation of this pathway leads to BCC development.[1]

BCCs have multiple dermoscopic features. According to Wozniak-Rito et al,

> Dermoscopy structures can be divided into three categories: vascular, pigment-related, and nonvascular/nonpigment-related. Vascular structures consist of arborizing vessels and short, fine telangiectasias. Structures related to pigment include maple leaf–like areas, spoke-wheel areas, multiple blue-grey globules, in-focus dots, and concentric structures. Other structures, such as ulcerations, multiple small erosions, shiny white-red structureless areas, and white streaks, can be classified as nonvascular/nonpigmented structures.[4]

In this issue of the *Journal of the American Academy of Dermatology*, Reiter et al have performed a systematic review of studies reporting the accuracy of naked eye examination and dermoscopy for the diagnosis of BCC. A meta-analysis for sensitivity and specificity was performed by using a bivariate mixed-effects logistic regression modeling framework. A total of 17 studies were identified. The pooled sensitivity and specificity of dermoscopy for the diagnosis of BCC were 91.2% and 95%, respectively. In studies comparing test performance, adding dermoscopy to naked eye examination improved sensitivity from 66.9% to 85% (P = .0001) and specificity from 97.2% to 98.2% (P = .006). The sensitivity and specificity of dermoscopy were higher for pigmented than for nonpigmented BCC. Sensitivity increased when experts performed dermoscopy and when the diagnosis was based on in-person dermoscopy as opposed to dermoscopic photographs. The authors concluded that dermoscopy is a sensitive and specific adjunctive tool for the diagnosis of BCC, being especially valuable for pigmented BCC.[5]

Dermoscopy utilization has increased dramatically over the past 2 decades in the United States, with more than 80% of dermatologists using the technique on at least some lesions.[6] I have been using dermoscopy for years; although I do not consider myself an expert, my ability as a dermoscopist has increased with time. For the 20% of dermatologists who have not adopted dermoscopy

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into their practice, I strongly encourage them to do so. Despite the reality that no patient wants to learn that they have a skin cancer, you will hear a sigh of relief if you can state, with reasonable confidence, that a diagnosis of a pigmented BCC is favored over a melanoma. The subsequent wait for the biopsy result becomes much less anxiety provoking.

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JAAD Game Changers: Multivariate analysis of potential risk factors for lymph node metastasis in patients with cutaneous squamous cell carcinoma of the head and neck

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Capsule Summary

- Risk factors for metastasis from cutaneous squamous cell carcinoma are incorporated in tumor staging by the seventh edition of the American Joint Committee on Cancer Cancer Staging Manual.
- We confirmed most risk factors and also identified moderate differentiation as a predictor for lymph node metastasis.
- Moderate differentiation can be considered in tumor staging.

How did this article change the practice of dermatology?

The independent risk factors for cutaneous squamous cell carcinoma of the head and neck for the development of lymph node metastasis include location on the ear, tumor diameter >50 mm, moderate and poor differentiation, and tumor thickness >2 mm. This article added moderate differentiation as a predictor for lymph node metastasis.[1]

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