Clinical and Dermoscopic Features of Cutaneous Melanoacanthoma

Cutaneous melanoacanthoma (CM) is traditionally considered to be a heavily pigmented variant of seborrheic keratosis (SK).1 The characteristic histologic feature of CM is the presence of large, highly dendritic, melanin-rich melanocytes spread throughout an acanthotic epidermis.2 Owing to their pigmentation, CMs may mimic the clinical appearance of melanoma.1 Although the dermoscopic features of SK are well defined, little is known about the dermoscopic features of CM.3,4 Our objective was to evaluate the clinical and dermoscopic features of CM.

Methods | We obtained approval from the institutional review board of Memorial Sloan Kettering Cancer Center for the study of existing data without written informed consent. A search of the institutional pathology database from January 1, 1997, through December 31, 2014, identified 19 reports containing the term melanoacanthoma. Ten lesions had no available images. One lesion was a collision of a CM and squamous cell carcinoma and was excluded, resulting in a total of 8 lesions. We analyzed data from February 1 through March 20, 2015.

Results | The median patient age was 65 years. Six patients were male. Lesions were present on the trunk (n = 2), head and neck (n = 3), and extremities (n = 3). All cases underwent biopsy owing to physician (n = 6) or patient (n = 2) concern for skin cancer. The mean number of ABCDE clinical criteria (asymmetry, border irregularity, color variegation, diameter >6 mm, or evolution) present in each lesion was 3.5 (range, 0-5). The mean maximum diameter of the lesions was 11.4 (range, 2-45) mm. Six CMs had clinical features typical of an SK, such as a velvety surface, keratotic plugging, and/or a stuck-on appearance. The clinical color of 3 lesions was uniform, whereas the other 5 lesions showed 2 or more colors. Light brown (n = 5) was most common, followed by dark brown (n = 4), black (n = 1), pink (n = 1), and gray-blue (n = 1).

All lesions had at least 1 dermoscopic feature associated with SK (mean, 2.9; range, 1-5). Of these features, comedolike openings (n = 7), sharp demarcation (n = 5), and more than 2 milialike cysts (n = 4) were most common, followed by ridges and/or fissures (n = 3), the appearance of a moth-eaten border (n = 2), and hairpin vessels (n = 2) (Figure 1 and Figure 2). Other dermoscopic features present included a blue-white veil overlying raised areas (n = 3) and atypical dots (n = 2). Pigment networklike structures, polymorphous vessels, dotted vessels, granularity, erosions, and/or hemorrhagic crusts were present in 1 case each. Six lesions contained melanoma-specific dermoscopic structures (ie, blue-white veil, atypical dots, granularity, and polymorphous vessels).

An expert dermoscopist (C.C.) blinded to the diagnosis evaluated the clinical and dermoscopic images from all the cases. Seborrheic keratosis (n = 8), melanoma (n = 2), benign melanocytic neoplasm (n = 2), solar lentigo (n = 1), and actinic keratosis (n = 1) were considered. Seborrheic keratosis was the leading diagnosis in 7 cases and the only diagnosis in 3 cases.

Discussion | Two articles3,4 have previously reported on the dermoscopic appearance of CM; the first identified a starburst pattern3 and the second revealed ridges and fissures.4 All of our cases had dermoscopic features characteristic of SK.
ever, melanoma-specific dermoscopic criteria were present in 6 lesions. This finding highlights the challenge in differentiating CM from melanomas and underscores the importance of interpreting melanoma-specific structures in the context of criteria for melanocytic lesions when using the 2-step algorithm.5 Dermoscopy users must also be familiar with the advantages and limitations of polarized and nonpolarized dermoscopy to maximize diagnostic accuracy because superficial details (eg, comedolike openings) may be poorly visualized or absent with polarized dermoscopy (Figure 2B and C). Surprisingly, few lesions in our series were heavily pigmented, which is contrary to the common textbook description of CM.1

In summary, we found that CMs present a diagnostic challenge. The use of dermoscopy, particularly the 2-step algorithm and pattern analysis, may help to identify these uncommon tumors as benign. Nonetheless, physicians should remain cognizant that melanomas and other cutaneous malignant neoplasms can present with SK-like features or directly in association with SKs. To maintain a high sensitivity for melanomas and other cutaneous malignant neoplasms, dermatologists can improve access to specialty care in a cost-effective manner.2 Not only can telemedicine play an important role in reducing wait times and accommodating persons without local dermatologists but it can also act as a means of educating primary health care professionals (PHCPs) regarding the management of common skin conditions.5

Adherence to Teledermatology Recommendations by Primary Health Care Professionals: Strategies for Improving Follow-up on Teledermatology Recommendations

Dermatology is well suited to telemedicine because diagnosis and management greatly depend on the visual presentation of a disease. Studies have shown little difference between teledermatology and conventional face-to-face (FTF) care in clinical outcomes.1 By using communication technologies, dermatologists can improve access to specialty care in a cost-effective manner.2 Not only can telemedicine play an important role in reducing wait times and accommodating persons without local dermatologists but it can also act as a means of educating primary health care professionals (PHCPs) regarding the management of common skin conditions.3

The Dermatology Division in the Atlanta Veterans Affairs Medical Center started its teledermatology service on July 5, 2012, and receives referrals from 10 community-based outpatient centers. Before the launch of teledermatology, a dermatology training course (DTC) was conducted, funded as a “miniresidency” by the Office of Specialty Care Transforma-