Acronym Update Recognizes Change as a Significant Melanoma Risk

The addition of "E" to the ABCD criteria is a welcome, long-awaited, and well-supported change.

By Jonathan Wolfe, MD

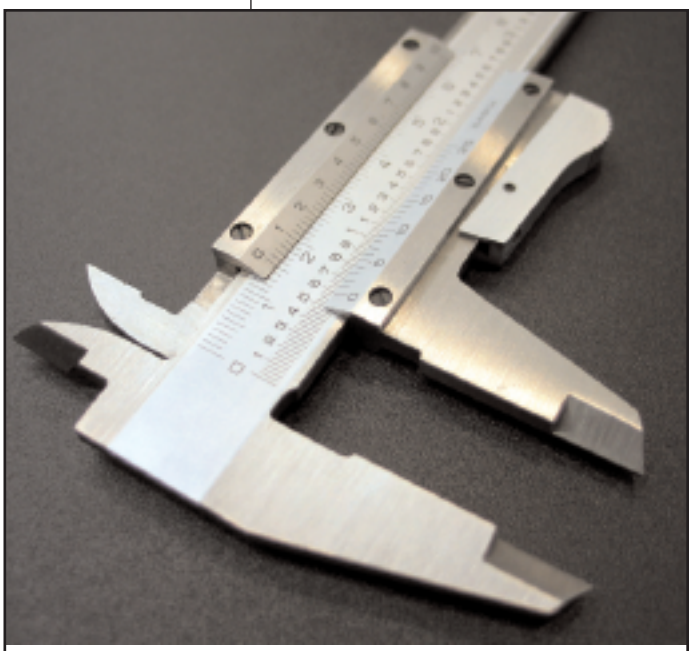
Twenty years after promulgation of the ABCD criteria for lesion assessment, medical care providers and the general public have largely embraced asymmetry, border irregularity, color variegation, and diameter (greater than 6mm) as key indicators that a pigmented lesion may be melanoma and warrants appropriate medical assessment. Now the acronym has expanded to E for Evolving, a move that will hopefully facilitate earlier and more accurate identification of high-risk lesions.[1]

The History of E

Clinicians and advocacy groups have long warned the public that any lesion demonstrating change warrants evaluation by a dermatologist and often add this caveat to any discussion of the ABCDs. For our part, most dermatologists biopsy any suspicious lesion if the patient reports any change in shape, color, size, or symptomology. This may be in large part due the publication of an important paper in 1987 (two years after publication of the ABCD criteria) that found that a persistently changed or changing mole is the most significant risk factor for melanoma for a given individual.[2] Change outranked both personal and family history of melanoma as well as other risk factors, including irregular varieties of pigmented lesions, Caucasian race, immunosuppression, and excessive sun exposure.

The revised Seven-point checklist, though it has been widely supplanted by the ABCDs, also addresses change. It lists "change in size" as the first major feature of suspicious lesions and includes "change in sensation" among minor features.

Previous efforts to tack an "E" onto the ABCD criteria included among other propositions, adding "enlargement" or "elevation" as warning factors for melanoma.[3] One study of tumor assessment using the ABCD criteria plus E for enlargement found that "the specificity of the individual criteria for the diagnosis of melanoma versus other pigmented tumors was 72, 71, 59, 63 and 90 percent for ABCDE, respectively.[4] In the same study, sensitivity for the diagnosis of melanoma was 84 percent for E, and 57, 57, 65, 90 percent for ABCD, respectively.



Knowing that a changing mole has one of the highest estimated relative risks for melanoma, dermatologists should welcome the change and encourage patients to be vigilant for "Evolution" when conducting skin self-exams.

A more recent study determined that both nonuniformity as viewed by dermoscopic imaging and change (growth) as demonstrated by total body photography significantly increased the likelihood of malignancy

in melanocytic neoplasms.[5] Patient reports of change in size, color, or shape within the last year were significantly more often associated with biopsy-confirmed melanomas than with benign pigmented lesions in Kittler et al's study.[5] Change is a significant independent predictor of malignancy, the study concluded.

The Current E Movement

In their December 2004 article, Abbassi et al propose the addition of E for Evolution to the ABCD criteria, based on an analysis of data from 1980 thru 2004.[1] While the available data do not support lowering the diameter criterion from 6mm, the authors conclude, they do confirm the significance of evolving pigmented lesions. Change or "evolution" in size, shape, symptoms, surface, and shades of color warrant attention from patients and physicians, the paper concludes.

Evolution may be especially significant in the early identification of nodular melanoma (NM) and superficial spreading melanoma (SSM).[3] Where NM frequently fail to meet the ABCD criteria for suspicion, one study revealed that lesion change was reported in 78 percent of cases of NM.[3] The implications for earlier diagnosis of NM could be critical. A study published just two months ago suggests that many cases of NM are diagnosed late.7 While SSM is generally diagnosed as an early tumor (77 percent presenting less than 1mm thick), NM comprised 34 percent of melanomas 2mm or larger, the authors report.

A Welcome Addition

The addition of E to the criteria for gross assessment of pigmented lesions finally acknowledges the significance of "change" as a risk factor for melanoma. As a result, the public will hopefully grow more aware of the need to seek dermatologic assessment of any lesions that demonstrate change.

Knowing that a changing mole has one of the highest estimated relative risks out of all risk factors for melanoma, dermatologists should welcome the change and encourage their patients to be vigilant for "Evolution" when conducting regular skin self-exams.

1. Abbasi NR, Shaw HM, Rigel DS, Friedman RJ, McCarthy WH, Osman I, Kopf AW, Polsky D. Early diagnosis of cutaneous melanoma: revisiting the ABCD criteria. JAMA. 2004 Dec 8;292(22):2771-6.

2. Rhodes AR, Weinstock ME, Fitzpatrick TB, et al. Riskfactors for cutaneous melanoma: A practical method of recognizing predisposed individuals. JAMA 1987 Dec 4;258(21):3146-54.

3. .Polsky D. The ABCDEs of melanoma: an evolving concept.

4. Thomas L, Tranchand P, Berard F, Secchi T, Colin C, Moulin G. Semiological value of ABCDE criteria in the diagnosis of cutaneous pigmented tumors. Dermatology. 1998;197(1):11-7.

5. Lucas CR, Sanders LL, Murray JC, Myers SA, Hall RP, Grichnik JM. Early melanoma detection: nonuniform dermoscopic features and growth. J Am Acad Dermatol. 2003 May;48(5):663-71.

6. Kittler H, Seltenheim M, Dawid M, Pehamberger H, Wolff K, Binder M. Morphologic changes of pigmented skin lesions: a useful extension of the ABCD rule for dermatoscopy. J Am Acad Dermatol. 1999 Apr;40(4):558-62.

7. Demierre MF, Chung C, Miller DR, Geller AC. Early detection of thick melanomas in the United States: beware of the nodular subtype. Arch Dermatol. 2005 Jun;141(6):745-50.

New in Your Practice

Thinking Outside the Box. If you believe the FDA's recent "black box" warning for Protopic (tacrolimus, Astellas Pharma) and Elidel (pimecrolimus, Novartis) was unwarranted, you're not alone. A panel of experts at the Dermatology Foundation's 2005 annual Clinical Symposia, concluded that CTCL cases linked to treatment with TCIs were most likely undiagnosed CTCL cases pre-existing the initiation of TCI therapy. The panel unanimously agreed that the reported CTCL cases did not result from TCI therapy and recommended that a new panel consisting of cutaneous lymphoma experts convene to further evaluate and discuss the safety of TCIs.

Risky Vocation. Your patients whose careers result in chronic exposure to ionizing radiation at low to moderate levels are at a higher risk for developing basal cell carcinoma, particularly those with lighter eye and hair color, a study in last month's International Journal of Cancer(115:828) confirms. Specifically, the study found that radiologic technologists are at an increased risk of BCC but not SCC and that this risk is highest for those technologists who began working in the 1940s and 1950s.

A Clear Plan. An eight-week treatment with Aldara Cream (5% imiquimod, 3M) may result in complete clearance of AKs for up to 18 months, according to a recent study in Dermatologic Surgery (31:659). At 12 to 18 month follow-ups, 75 percent of patients treated three times per week and almost 60 percent of patients treated twice a week demonstrated complete AK clearance. At 18 months, recurrence or development of a new lesion in the original treatment area occurred in only 24.7 percent of patients treated three times a week and in 42.6 percent of patients treated twice a week.

ASCO News. As many as 53 percent of 57 patients with stage IV metastatic melanoma treated with MedImmune's Vitaxin (MEDI-522) alone reached the one-year survival mark, with the median survival being 12.7 months, according to a study recently presented at the American Society of Clinical Oncology's (ASCO) annual meeting. • Extended follow-up of a Phase III study presented confirms that adding Genta's Genasense (oblimersen sodium) to dacarbazine (DTIC) increases the overall response, complete response, durable response, time-to-progression, and overall survival seen in advanced malignant melanoma patients. • Another study presented shows Progen's PI-88 (a novel antiangiogenic and antimetastatic heparanase inhibitor) provides benefit to some advanced melanoma patients. The median survival of the 37 evaluable patients was nine months.