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Aids to Detection of Changing Pigmented Lesions during Partner-Assisted Skin Examination

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Recognition of change in nevi requires comparison of lesions over 6 months to one year.¹ Melanoma patients performing partner-assisted skin examination (PASE) needed a way to monitor moles²; thus, body maps with margin notes; and body maps with a scorecard were sequentially assessed.

As previously described, Stage I and II A melanoma patients and their partners learned to assess moles for ABCDE (asymmetry, border irregularity, color variegation, diameter ≥ 6 mm, and evolution) in a skills training session.² Because the first group did not use asymmetry, the A was changed to Assess (Table 1). The institutional review boards of Dartmouth–Hitchcock Medical Center and Northwestern University approved the research protocol.

Outcome measures were frequency of use and helpfulness of the aid, the number of watched lesions, and lesions designated as changing by the patient at the 4 month visit in comparison with the dermatologist's evaluation using dermoscopy. Only lesions clinically concerning to the dermatologist were biopsied.

There were no differences in age, gender, education, and income of the groups. The body maps with scorecard were used more often than the body map. (χ^2 (1, $N = 67$) = 12.66, $p < .001$) The body maps with scorecard were more helpful in recognizing change than the body maps. (χ^2 (1, $N = 46$) = 23.50, $p < .001$). Using one-way ANOVAs, significant differences were found between the 2 groups when comparing the mean number of self-reported watched lesions (F (2, 82) = 7.60, $p < .001$) and the number of changing lesions shown to the dermatologist. (F (2, 99) = 13.75, $p < .001$) (Table 2).

Because partners had difficulty identifying asymmetry in moles, we modified the ABCDE rule to: Assess each mole for Border irregularity, Color variation, Diameter ≥ 6 mm, and Evolution of one or more features. The sensitivity and specificity of diagnosis of melanoma

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are 65.5% and 81%, respectively, if 3 criteria of the ABCD are present.³ Thus, replacing Asymmetry with Assess and having people check for B, C and D has acceptable sensitivity and specificity.

The scorecard was an “anchor” to compare the current features of the mole with its prior appearance. The success of calorie counting in the daily food records of weight loss programs led one of the authors (JKR) to develop the scorecard.⁴ Our hypothesis was that the act of measuring and counting nevi gave some people a sense of control over the uncertainty of being at risk to develop another melanoma. By assessing the features, pairs were able to make decisions about change in a pigmented lesion. Clinicians monitor clinically suspicious nevi for 3 months rather than biopsy immediately, thus, our study allowed participants to monitor the lesion over 3 months and then be evaluated by the dermatologist.⁵ Not only did the pairs using the scorecard identify changing lesions but they also seem to have reassured themselves that seborrheic keratoses were not concerning.

While the sample size is small and the duration of the study is limited, the scorecard is a promising aide to assist PASE detection of a changing lesion. In 2008, the American Academy of Dermatology offered the Body Mole Map to guide people. Offering the scorecard as part of this recording system may help monitor nevi for change.

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Table 1

Scorecard

Assess Features of Mole #1	Baseline	First Month	Second Month	Third Month
Irregular Border*				
Variety of Colors^				
Diameter (mm)†				

* Score the border irregularity as:

- 1 = regular border or smooth border. A regular, smooth border may have 1 projection.
- 2 = cannot decide
- 3 = irregular

^ Score the color variation as:

- 1 = one or two even colors of the mole without blending of color.
- 2 = cannot decide
- 3 = a variety of shades of brown, black, red, blue-black or white over the surface of the mole with blending of the colors like wet finger paint.

† Measured the largest diameter of the pigmented lesion with a millimeter ruler.

Table 2

Pigmented Lesions Reported by Pairs with Clinical and Pathologic Diagnosis

Characteristic	Group A	Group B
	Body Maps Alone (n = 26)	Body Maps + Scorecard (n = 26)
Pigmented Lesions		
Mean Number of Watched Lesions on Body Map (range)	14.64 (0–68)	21.00* (1–59)
Mean Number of Changing Lesions Reported at 4 months to the Dermatologist (range)	9.00* (2–20)	2.00 (0–3)
Clinical Diagnosis by the Dermatologist # Patients (Range of lesions per patient)		
Seborrheic keratosis	6 (1–16)*	0
Nevi	2 (1–4)	0
Dysplastic nevi	1	2
Melanoma	0	1
Number of Biopsies	1	3
Pathologic diagnosis		
Dysplastic nevi	0	1
Melanoma in situ	1	2

* Significant between group differences (Tukey's LSD posthoc tests, $p < .001$)