Negative pigment network able to distinguish melanoma

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Negative pigment network can be used to distinguish melanoma from Spitz nevus and other benign lesions, according to a study published online Oct. 11 in the *Journal of the American Academy of Dermatology*.

(HealthDay)—Negative pigment network (NPN) can be used to distinguish melanoma from Spitz nevus and other benign lesions, according to a study published online Oct. 11 in the *Journal of the American Academy of Dermatology*.

Maria A. Pizzichetta, M.D., from the National Cancer Institute in Aviano, Italy, and colleagues assessed the frequency, sensitivity, specificity, and odds of NPN in digitalized images of skin lesions from 679 patients with histopathological diagnosis of dermatofibroma (115), melanocytic nevus (220), Spitz nevus (139), and melanoma (205).

The researchers found that the frequency of NPN was higher in the melanoma group (34.6 percent) than in the Spitz nevus (28.8 percent),

melanocytic nevus (18.2 percent), and dermatofibroma (11.3 percent) groups. The odds of melanoma diagnosis versus non-melanoma diagnosis in the presence of NPN were significantly increased (odds ratio, 1.8). For melanocytic nevi and dermatofibromas, the odds ratios were very low (0.5 and 0.3, respectively), while for Spitz nevi, the odds ratio of 1.1 was not statistically significant. There was a significantly higher frequency of multicomponent pattern (68.1 percent), asymmetric pigmentation (92.9 percent), irregularly distributed NPN (87.3 percent), and peripheral location of NPN (66.2 percent) in melanomas compared to dermatofibroma, melanocytic nevus, and Spitz nevus.

"The overall morphologic pattern of NPN, such as the irregular distribution and the peripheral location of NPN, along with the multicomponent pattern and the asymmetric pigmentation could be used as additional features in distinguishing melanoma from Spitz nevus and other benign lesions," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)