The evolution of melanoma diagnosis: 25 years beyond the ABCDs
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Twenty-five years after publishing the mnemonic "ABCD" to facilitate the early diagnosis of melanoma, the group who came up with that moniker says early detection remains a key factor in lowering mortality from malignant melanoma. Darrell S. Rigel, M.D. and colleagues from the Ronald O. Perelman Department of Dermatology at New York University School of Medicine say that, despite all of the advances in melanoma diagnosis, timely recognition, detection, and rapid treatment of melanoma remain critical. Their report appears online on CA First Look, and will appear in the September/October issue of CA: A Cancer Journal for Clinicians.

Although examining tumor cells under a microscope remains the gold standard for diagnosing melanoma, it is one of very few cancers that has the potential to be diagnosed at an early stage through noninvasive approaches because it appears on the outside of the body. Based on their experience in evaluating patients at the New York University School of Medicine Melanoma Cooperative Group, the authors of the current report recommended in 1985 that attention to asymmetry (A), border irregularity (B), color variegation (C), and diameter more than 6 mm (D) of pigmented skin lesions could promote earlier recognition of malignant melanoma.

Approaches to melanoma diagnosis have dynamically evolved during the ensuing quarter century. In the 1990s, dermoscopy enabled the recognition of new subsurface features to help differentiate between malignant and benign pigmented lesions. During the last decade, new computer-based technologies have improved diagnostic sensitivity and specificity and may result in optimizing lesion selection for biopsy and pathology review.

"From the development of the ABCDs through current attempts that use complex computer algorithms and genetic markers, a clinician's ability to detect melanoma in its earliest form has been augmented," write the authors. "However, a 'good clinical eye' is still fundamental to selecting the lesions for evaluation among the sea of those that are prevalent."

More information: "The Evolution of Melanoma Diagnosis: 25 Years Beyond the ABCDs," Darrell S. Rigel, MD; Julie Russak, MD; Robert Friedman, MD, CA Cancer J Clin Published Online: July 28, 2010 (doi:10.3322/caac.20074); Print Issue Date: Sept/Oct 2010.

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