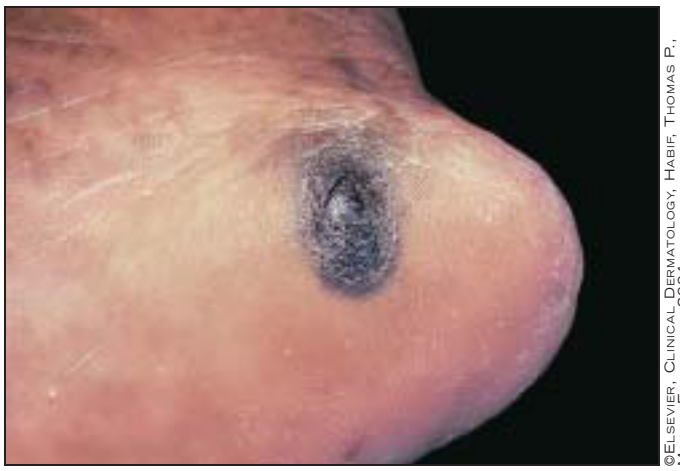

Melanoma field cells, detected in conjunction with acral melanomas (right), may prompt wider surgical margins.

Melanoma Field Cells May Explain Recurrence

BY BRUCE JANCIN

MAUI, HAWAII — The recent discovery of an entity called melanoma field cells that are often present in seemingly normal skin surrounding primary melanomas could ultimately force an overhaul of standard recommended excision margins.

These melanoma field cells are morphologically normal junctional melanocytes and thus cannot be identified using histopathologic criteria. Yet they are genetically melanoma as demonstrated using comparative genomic hybridization and fluorescent in situ hybridization, Dr. Maxwell A. Fung explained at the annual Hawaii Dermatology Seminar sponsored by Skin Disease Education Foundation.

The field cells appear to represent an early stage of melanoma in situ.

The cells provide a possible explanation for the tendency of acral melanoma and certain other melanoma types to recur, sometimes many years

Melanoma field cells are morphologically normal junctional melanocytes that are genetically melanoma.

DR. FUNG

after complete excision of the primary tumor in accordance with the currently recommended safety margins, said Dr. Fung of the University of California, Davis.

Melanoma field cells were first described by dermatologists at University of California, San Francisco, led by Dr. Boris C. Bastian, who recently reported finding melanoma field cells in histologically normal epidermis in 14 of 19 patients who had acral melanomas that had been excised with negative surgical margins.

Notably, the melanoma field cells extended a mean of 6.1 mm beyond the histopathologic margins of the in situ melanomas and 4.5 mm beyond the margins of the invasive melanomas (J. Invest. Dermatol. 2008;128:2024-30).

"I find that particularly compelling because, as you know, we often use 5-mm margins in excising melanoma in situ," Dr. Fung commented.

Another key finding was that the presence and the extent of melanoma field cells were unrelated to the primary tumor thickness, the factor that is currently used to determine the recommended margins of excision.

Although at this early date melanoma field cells have been detected only in conjunction with acral melanomas, Dr. Bastian believes it likely they also occur in other types of melanoma having a lentiginous growth pattern.

Dr. Bastian and his coworkers noted that their study was observational, and that before any serious reevaluation of recommended surgical margins can be undertaken, there will need to be case-control and prospective studies confirming that field cells result in local melanoma recurrence.

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