**Shave Biopsy May Impair Correct Melanoma Staging**

However, concerns that cutting through cancers may disperse cells and harm patients appear unfounded.

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**Expert Reviews Evidence for Melanoma Excision Margins**

By Bruce Jancin

Maui, Hawaii — Evidence from randomized clinical trials indicates that excision margins of 2 cm are optimal for primary melanomas greater than 2 mm thick. Dr. Merrick Ross said at the annual Hawaii Dermatology Seminar sponsored by Skin Disease Education Foundation.

That’s good news for patients, because 90% of surgical defects resulting from a 2-cm-wide excision margin on the trunk or a proximal extremity can be closed primarily without grafts, noted Dr. Ross.

He predicted that Mohs will be a niche procedure in melanoma. "Critics of Mohs for melanoma argue it is not the standard of care and is unlikely to offer a cost advantage over standard excision, so therefore it should be evaluated in a randomized trial before gaining acceptance. I’m not convinced that’s true," Dr. Ross said. "First of all, that standard is never going to be done. Second, we didn’t use randomized clinical trials to set standards for melanoma in situ. Once we get a body of literature that’s very robust and shows very good outcomes for Mohs surgery, it may become a standard of care."

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"The take-home message is we probably don’t need wider margins than 2 cm for any melanoma." Dr. Ross.

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The sample comprised 51 excisional biopsies, 44 punch biopsies, and 128 shave biopsies. Three-fourths (167) of the specimens analyzed were from thin melanomas (1 mm or less). Only 16% of excisional biopsies had positive margins. Just 2% were positive deep margins, and none were found in specimens from the thin melanomas.

Punch biopsy specimens also had no positive deep margins in the thinner melanomas. Positive margins were more common overall (68%), but were mostly wide margins attributable to the punch technique. Only 7% of all punch biopsies had positive deep margins.

Half of all shave biopsies produced positive margins, including the 22% that had positive deep margins. The analysis revealed positive deep margins for 17% of the thinner melanomas sampled by the shave technique.

Shave biopsy was most commonly done for thinner melanomas. It also produced samples that were significantly thinner. A review of 56 specimens showed the average biopsy thickness to be 1.41 mm with the shave technique, 3.58 mm with the punch method, and 3.19 mm for excisional biopsies.

"Based on these data," the authors concluded, "we argue the use of an excisional biopsy technique for all skin lesions where melanoma is in the differential diagnosis when excision is feasible."

In the second study, Dr. Paul A.M. van Leeuwen and his colleagues in the Netherlands prospectively studied 471 patients who were diagnosed with stage I or II melanoma. Patients were randomized to 1- or 2-cm excision margins.

"It was a 2-cm margin, Dr. Merrick Ross said at the annual Hawaii Dermatology Seminar sponsored by Skin Disease Education Foundation. He said that trial, if a 4-cm margin is used, it is not significant," Dr. Ross explained. "The standard margin for melanoma in situ is 5 mm. Unlike the recommendations for true melanoma, the standard for melanoma in situ is not based upon prospective randomized trials. It’s simply accepted practice based upon extensive clinical observation and experience indicating that the risk for loco-regional recurrence is extremely low with 5-mm margins. This sets a precedent that may be relevant to the future status of Mohs surgery for melanoma, he continued.

"If you do a shave and miss the depth of the specimen, you miss a key bit of information about the thickness of the melanoma. Your decision-making tree could be compromised," said Dr. Roenigk, professor of dermatology and chair of the department of dermatology at Mayo Medical School, Rochester, Minn.

On the flip side, it is easier to do a shave biopsy, he noted, but the time required for an excisional biopsy, the delay in diagnosis until an excisional biopsy can be scheduled, and the reality that some patients won’t come back for the procedure.

He suggested that, as a result, doing more shave biopsies can mean more melanoma diagnoses, even though excisional biopsies are more comprehensive. From Dr. Roenigk’s perspective, the studies demonstrate the importance of doing deep biopsies even when the suspected melanoma appears to be thin.

"You shouldn’t be shy about taking extra tissue when you are thinking about a melanoma. It should be a thick, deep shave," he said. "If you are thinking about a melanoma, you shouldn’t worry about the scar."

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The investigators divided the population by biopsy type: wide excision biopsy (279 patients), narrow excision biopsy (109), excision biopsy with positive margins (52), and incision biopsy (31). Biopsy type did not prove to be significant in univariate or multivariate analyses of disease-free survival or overall survival. The presence of residual tumor cells in reexcision specimens for 41 patients also was not significant.

"Incisional biopsies are not recommended, but there is no cause for concern when an excision biopsy turns out to have positive margins," the authors concluded.

In a telephone interview, Dr. Randall K. Roenigk agreed that both studies make good points, but he said that they are not likely to dissuade physicians from doing shave biopsies.

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