Micrometastases Don’t Hurt Melanoma Prognosis

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ORLANDO — It is possible that the presence of micrometastases on sentinel lymph node biopsy may have little clinical prognostic value when predicting the survival of patients with malignant melanoma, according to a review of 415 patients.

The overall survival of those who had micrometastases less than 1 cm was similar to the overall survival achieved by patients with no metastases, Dr. Arun P. Venkat reported at the annual meeting of the American Society for Dermatologic Surgery.

In contrast, overall survival was significantly worse in patients who had macrometastases greater than 1 cm, said Dr. Venkat.

Micrometastases are most often detected with sentinel lymph node biopsy (SLNB), whereas macrometastases can be detected clinically or with positron emission tomography/computed tomography (PET/CT).

“Improved immunohistologic techniques are making it easier to find micrometastases in malignant melanoma, so the real question is whether micrometastases are an accurate predictor of recurrences and prognosis or are we unnecessarily upstaging patients by finding more micrometastases?” said Dr. Venkat, who is a dermatology resident at the University of Iowa Hospitals and Clinics in Iowa City.

The prognostic relevance of micrometastases versus macrometastases “has not been clearly differentiated,” he noted.

The 415 patients had been followed for at least 3 months: 73 were deemed to

Negative Stain Still Positive for Rare Malignancy

SAN FRANCISCO — The diagnosis of blastic natural killer-cell lymphoma requires a dermatopathologist who knows the typical immunohistochemical patterns of the disease and is aware of exceptions to rules.

Also called CD4-positive, CD56-positive (CD4+/CD56+) hematodermic neoplasm, the disease is a rare, aggressive malignancy that frequently presents with skin lesions. Immunohistochemical staining typically produces immunopositivity for CD4, CD56, and CD123, but rare cases have been reported of patients who tested negative in one or more of these immunohistochemical studies.

At the annual meeting of the American Society of Dermatopathology, Dr. Rajwant Malhotra and Dr. Alison L. Uzieblo reported on two cases of CD4+/CD56+ hematodermic neoplasm presenting as skin nodules and plaques. One of the cases in their poster was CD123-negative.

“Loss of CD123 expression is a distinctly unusual event” in CD4+/CD56+ hematodermic neoplasm, wrote the authors, both from the anatomic pathology department at Beaumont Hospital, Royal Oak, Mich. Given the poor prognosis associated with this disease, “it is important to be aware of this potential phenomenon when evaluating cutaneous hematolymphoid malignancies.”

One patient was a 77-year-old man who presented with skin lesions on his back and trunk. Flow cytometric analysis subsequently showed bone marrow involvement. The second patient, a 70-year-old man, had a 3-cm nodular plaque on his scalp. Further clinical evaluation found no evidence of bone marrow involvement.

Histological examination of biopsies from both patients revealed dense dermal infiltrates composed of sheets of medium-sized cells with angulated to round nuclear contours in the dermis. The lesional cells were positive for CD4, CD43, and CD56, but only one patient’s biopsy demonstrated CD123 positivity. Both showed a high proliferation rate with Ki-67 staining noted in approximately 50% of cells in one patient and 70% of cells in the other.

—Sherry Boschert
have micrometastases, as evidenced by SLNB, and 81 had macrometastases as evidenced by PET/CT. Patients with macrometastases had a significantly lower probability of survival. Their hazard ratio for all causes of death was 3.73, compared with 2.03 in patients with micrometastases.

The survival difference between macrometastases versus micrometastases and macrometastases versus no metastases was significant, but the difference between micrometastases and no metastases was not significant, he noted.

“The statistically significant difference in survival using the log-rank test had the following P values: P equal to .029 for macrometastases versus micrometastases, and P less than .0001 for macrometastases versus no metastases,” he said. Adding that “The difference in survival between micrometastases and no metastases was not statistically significant, with a P value of .148.”

He offered some explanations as to why micro- and macrometastases would differ prognostically.

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“Micrometastases may actually be false positives, as benign nevi can have nevus rests in lymph nodes. Additionally, they might also act as an antigen to activate the immune system to fight against the cutaneous malignant melanoma,” he said.

“A few malignant cells in the sentinel lymph nodes may not mean that the prognosis is poor,” he added. “The melanoma cells in the lymph nodes may activate the immune system and actually cause an immune response.”

Dr. Venkat said he had no conflicts of interest to declare relevant to his presentation.

He noted that the study was funded by an American Society of Dermatologic Surgery Cutting Edge Research Grant.