Incidence of Melanoma Expected to Rise in 2010

BY DOUG BRUNK

SAN DIEGO — Data on the estimated incidence of melanoma in the United States in 2010 from the National Cancer Institute's Surveillance, Epidemiology and End Results program will not be available until later this year, but Dr. Darrell S. Rigel does not expect the news to be good.

"Melanoma rates are rising significantly in the United States and in other parts of the world," he said at a melanoma update sponsored by the Scripps Clinic.

"Whatever criteria you use, it's clear that we're seeing more melanomas than we've seen in the past, and we'll probably continue to do so in the next 5-10 years."

According to the most recent SEER data, in 2009 there were 68,720 newly diagnosed cases of invasive melanoma and 53,120 cases of in situ melanoma. Dr. Rigel and his associates at the New York University Interdisciplinary Melanoma Cooperative Group estimate that the projected lifetime risk of invasive melanoma was 1:58 in 2009, up from 1:65 in 2004.

"Should that rate of increase continue, the risk will be about 1:50 by the year 2015," said Dr. Rigel, who is a professor of dermatology and dermatologic surgery at New York University Medical Center. "We've been pretty close on these projections over the last few years. One in 50 is a lot. That's 2% of the population."

Factor in the incidence of in situ melanoma, and the risk of any American getting any kind of melanoma jumps to 1:30, which would be 121,840 total cases in 2009.

"It's a significant problem," he said.

Nine years ago, researchers who analyzed the melanoma incidence rates in the United States from 1960 through 1997 forecasted a subsequent growing incidence of melanoma. They concluded that the increase in melanoma incidence is real—"not due to improved diagnosis," Dr. Rigel said—and predicted that the incidence would continue to rise for the next decade or more (J. Natl. Cancer Inst. 2001;93:67-83).

Results from studies published in the past decade suggest that the incidence of melanoma is also rising in other parts of the world.

In Finland, for example, the incidence of melanoma increased from 1.5 cases to 12.8 cases per 100,000 men between 1953 and 2003, and from 1.8 cases to 10.4 cases per 100,000 women during the same time period (Int. J. Cancer 2006;119:380-4). In central Greece, the incidence increased from 1.4 cases to 5.2 cases per 100,000 people between 1988 and 1998 (Int. J. Tissue React. 2005;27:173-9). And in Columbia, the incidence increased from 2.7 cases to 13 cases per 100,000 people between 2003 and 2005 (Rev. Salud Pública 2007;9:595-601).

Dr. Rigel emphasized that the results from the best available studies in the medical literature suggest that the rising incidence of melanoma cannot be explained by increased surveillance or awareness, or by changing histologic criteria.

However, while the number of melanoma deaths continues to rise, 5-year survival rates are improving—from 86% between 1985 and 1989 to 92% between 1995 and 2002 (Cancer J. Clin. 2007;57:43-66).

"That seems incongruous," Dr. Rigel said. "The only way that can be happening mathematically is that the incidence has to be rising even faster. That's a compelling reason to explain why the rising incidence is real. According to the World Health Organization, melanoma is rising faster than any other cancer worldwide, on a percentage basis."

Dr. Rigel went on to caution that the current incidence of melanoma is probably underreported because the data from SEER are collected primarily from hospitals.

"The biopsy may be done in an outpatient setting," he explained. "It may go to an outpatient lab. It may be reexcised, and then it may go back to the same lab. It may never hit a hospital. That's why melanoma probably is significantly undercounted."

According to the American Cancer Society, melanoma kills one American citizen per hour. "Some people poohpooh skin cancer," Dr. Rigel said. "It's the most common cancer in women aged 25-29, and it's the No. 1 cancer killer in women aged 30-35. There are some subsets of the population that are particularly hurt by this disease." ■

Disclosures: *Dr. Rigel disclosed that he receives grants and advising and consulting fees from a number of pharmaceutical companies, including Neutrogena, Johnson & Johnson, Procter & Gamble, and Beiersdorf.*

New Evidence Helping to Refine Melanoma Management

BY SUSAN LONDON

SEATTLE — Evidence from recent and ongoing trials is helping to clarify the best strategies for managing cutaneous melanoma.

A hurdle to better melanoma management has been the high variability of the disease, exemplified in part by its wide-ranging presentation. Accumulating evidence suggests that melanoma may encompass several different diseases with differing biology, said Dr. William Dzwierzynski, professor of plastic and reconstructive surgery at the Medical College of Wisconsin in Milwaukee.

When initially evaluating a suspicious skin lesion, the type of biopsy is critical. "Excisional biopsy is probably the most key thing. You really try not to do an incisional or a shave biopsy," he said, unless the latter is deep and removes the whole lesion. Reassuringly, though, the type of biopsy does not affect survival (Am. J. Surg. 2005;190:913-7)."But we'll never know the depth of the lesion" with an incisional or shave biopsy, he pointed out, "so we'll never have the right prognosis."

Accurate diagnosis of melanoma requires permanent sections. "Melanoma is not accurately diagnosed on frozen sections. Don't do frozen sections on melanoma—you get a lot of false-negatives and a lot of false-positives," Dr. Dzwierzynski said at the annual meeting of the American Society of Plastic Surgeons.

Positron emission tomography (PET) imaging is unreliable for staging in patients with melanoma, yielding a false-negative rate of 79% when used preoperatively to identify occult nodal metastases (Cancer 2005;104:570-9). "There is not any conclusive data that PET scan is any more accurate than a chest x-ray or lab tests," he added. On the flip side, patients should not be assumed to have metastases solely based on a positive PET scan.

"I send everybody who has a melanoma that is 1 mm or greater to an oncologist," he added. "I tell them that the oncologist probably won't have anything to offer you, and that's a good thing. But they are the ones who are going to know if there are any investigational studies or treatment trials." Whenever possible, patients with advanced disease should be referred for clinical trials. "Investigational therapies—I think this is where the promise is," Dr. Dzwierzynski commented.

When it comes to resecting the tumor, contemporary margins are 1-3 cm for most invasive melanomas. Prospective studies have found no difference in survival between margins of 1-2 cm and larger margins of 3-5 cm, but methodologic limitations leave the issue unresolved, he said.

Optimal follow-up has not been established, but it is typically lifelong and multidisciplinary.

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Mohs surgery for invasive melanoma remains controversial. "There is a lot of distortion when you do Mohs," he noted. "It's really easy to get false-negatives and false-positives." To date, controlled survival data and randomized trials are lacking.

Sentinel node biopsy (SNB) is recommended for patients whose tumors have a Breslow thickness of greater than 1 mm and for those whose tumors are thinner but have adverse features, such as ulceration or a Clark level of IV or V. Currently, it is done to obtain prognostic information and identify the roughly 20% of patients who may benefit from a complete lymph node dissection, Dr. Dzwierzynski noted.

The results of the first Multicenter Selective Lymphadenectomy Trial (MSLT-1) raised the possibility that SNB also may be curing disease in some patients and improving survival (N. Engl. J. Med. 2006;355;1307-17). An ongoing follow-up trial, MSLT-2, is looking more closely at the issue and the possibility that patients with only microscopic disease in the sentinel node may be spared further surgery.

Importantly, there is a learning curve to the SNB procedure. In MSLT-1, the false-negative rate was 10% in a physician's first 25 cases, but fell to 5% thereafter (Ann. Surg. 2005;242:302-13). "So right now, the recommendation is that it does take probably 30 cases for that learning curve," he said.

The National Comprehensive Cancer Network recommends complete lymph node dissection for patients with a positive SNB, but a recent analysis of national data found that only half of such patients underwent the procedure (Ann. Surg. Oncol. 2008;15:1566-76).

"Complete lymph node dissection is a curative procedure," he commented. As such, it is extensive, more so than the lymph node sampling done for, say, breast cancer. "In most of my axillary dissections, I will remove 35-40 lymph nodes," Dr. Dzwierzynski said.

Several trials have shown that adjuvant high-dose interferon therapy modestly improves outcomes among patients with melanoma at high risk for recurrence, but with the tradeoff of substantial toxicity. The benefits are lost when the dose is reduced and therapy is shortened. "But there may be a subgroup in which interferon is useful," he added, so an individualized approach, with discussion of risks and benefits, is needed. It should not be given automatically "because it's the only thing that's available," he said.

The optimal approach to follow-up of patients with treated melanoma has not been established, but follow-up is typically lifelong and multidisciplinary, according to Dr. Dzwierzynski. Importantly, all patients must have lymph node palpation for detection of recurrences, and full-body skin checks for detection of second primaries.

In the one-quarter of patients who have a recurrence of melanoma after primary treatment, a variety of treatment options are used, including wide local excision, therapeutic lymph node dissection, isolated limb perfusion, radiation therapy, and various systemic therapies. ■

Disclosures: *Dr. Dzwierzynski reported that he had no relevant conflicts of interest.*