Plan Pregnancy by Age and Stage

Melanoma from page 1

There is an accumulation of recent data showing a lack of effect of pregnancy on melanoma survival, when studies control for Breslow depth of invasion (Cancer 1983;51:779; Lancet 1991;337:1164-5).

How long must a woman who has been treated for melanoma wait before becoming pregnant? My answer is always yes if the stage of your disease plus your age, she said. The risk of death associated with cutaneous melanoma is greatest with high-risk lesions greater than 3 mm in depth, although most melanomas that are treated are 1 mm or less.

A study reporting that 85% of patients with metastatic disease present within 2 years of initial diagnosis recommended a 2-year interval between melanoma surgery and pregnancy (Lancet 1991;337:653-5). Opinions differ about the waiting period, with some preferring Dr. Bologna, opting for a 3-year delay in a young patient with a high-risk lesion.

“The scenario that I see fairly frequently is the woman who is 40 years of age, has wanted to have children, and has an in situ lesion,” she said. “I tell them they can go ahead and try to get pregnant now and that we don’t have to wait the 2 years. The way I think, the older the patient and the thinner the lesion, the more I am going to talk about this.”

What can be done to minimize the risk of developing metastaic melanoma? Pregnant women should lower the threshold for performing a biopsy of suspicious pigmented lesions in pregnant women. “If you have a lesion that is worrisome to you, do a biopsy, don’t say you’ll wait until after the baby is born,” she said. Of multiple studies, three have shown increased tumor thickness for melanomas diagnosed during pregnancy, but this observation could be due to a variety of reasons, including delay in diagnosis resulting from the belief that moles change during pregnancy; relative immunosuppression; and the effects of hormones or growth factors, she said.

Her approach to the pregnant patient with melanoma is to perform a complete history plus skin and lymph node examination, to excise the lesion with the recommended margins, and to discuss sentinel lymph node (SLN) biopsy if there are no palpable nodes or if the Breslow depth is 1-4 mm. If signs or symptoms of metastatic disease are present, or if it is a high-risk lesion, then ultrasound or MRI is recommended. Use of MRI is accepted in the second and third trimesters, said Dr. Bologna, who reported that women have undergone SLN biopsy during pregnancy for melanoma (six patients) or breast cancer (three patients) observed no adverse reactions and nine healthy term babies (Ann. Surg. Oncol. 2007;14:218-21).

If a pregnant woman has metastatic melanoma, what is the chance that the child will also develop melanoma? If the placenta is involved, the chance of focal metastasis is about 20%-35%, with the majority of these babies not doing well, Dr. Bologna said. Melanoma is the tumor that most frequently metastasizes either to the placenta or amniotic fluid, accounting for at least half of tumors with fetal involvement.

Tape Test Helps Distinguish Melanoma From Atypical Nevi

BY BETSY BATES
Los Angeles Bureau

SAN DIEGO — Melanoma proved genetically distinguishable from atypical nevi when cells were collected from the stratum corneum using a custom-designed adhesive tape in a poster presentation at the annual meeting of the American Association for Cancer Research.

Molecular analysis of tape collected RNA identified an expression pattern of 20 genes that was 100% sensitive, 90.6% specific, and 92.4% accurate in detecting both in situ and invasive melanoma in 66 skin samples from Dr. William Wachsmann of the oncology/hematology division of the University of California, San Diego.

If confirmed in further studies, the technique could be used to obtain a skin sample “nonvasively and painlessly” and to receive an objective diagnosis based on a validated genetic biomarker. “This technique could become the preferred first line for evaluating pigment lesions suspicious for melanoma,” Dr. Wachsmann said in an interview.

The 20-gene cluster developed to detect the Epidermal Genetic Information Retrieval (EGIR) system (DermTech International) was selected from an original array of 310 differentially expressed genes put to the test in a preliminary comparison of 18 lesions that proved to be melanoma and 18 ultimately diagnosed as atypical nevi.

In both the preliminary study and the 66-sample testing set, suspicious pigmented lesions and normal skin regions were tape stripped four times using EGIR’s specific adhesive film designed by DermTech scientists. Total RNA was then isolated from the tape strips and amplified using microarray technology.

The resulting pattern analysis could distinguish melanomas from normal skin samples as well as from atypical nevi. Furthermore, at least three distinctive groups of atypical nevi were discernible, suggesting the potential of characterizing low- and high-grade nevi.

The finding could have significant diagnostic implications, reducing the number of unnecessary skin biopsies and taking some of the guesswork out of melanoma identification, said Dr. Harold Rabinovitz, a coauthor on the study and a dermatologist in private practice in San Diego. Currently, dermatologists can distinguish melanomas from an atypical nevus with about 60% accuracy. The levels of sensitivity and specificity obtained in the study, 100% and 90.6%, respectively, are “very, very high, and exciting,” Dr. Rabinovitz said in an interview.

“The plan is for the RNA samples obtained via EGIR-based tape stripping to be sent to a CLIA (Clinical Laboratory Improvement Amendments) lab for testing. In 3-5 days, the physician will receive a report back that, based on genetic profiling, offers a probability of the lesion in question being a melanoma,” he said.

The company plans to develop a point-of-care application of the technology, so that results would be available while the patient waits in the physician’s office.

Dr. Wachsmann is an uncompensated adviser to DermTech. Dr. Rabinovitz disclosed that he is a consultant, independent contractor, and advisory board member for DermTech. He also serves as a consultant, medical coordinator, and/or clinical investigator for other technologies applied to melanoma diagnosis. The first author on the study was Dr. Sherman Chang, director of molecular biology for DermTech in San Diego.

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Jury Remains Out on NSAIDs’ Effect on the Risk of Melanoma

BY BRUCE JANCIN
Denver Bureau

KYO TO, JAPAN — Does regular use of aspirin or other NSAIDs protect against melanoma?

The question remains wide open following the presentation of two large, well-controlled studies that drew diametrically opposite conclusions at an international investigative dermatology meeting.

The study designs are very different, and each has its strengths and weaknesses. “You can’t say one is better than the other,” session cochair Dr. Sushey Chen, director of the dermatology clinical outcomes and research unit at Emory University, Atlanta, said in an interview.

Dr. Clara Curiel-Lewandowski presented a case-control study involving 400 cutaneous melanoma patients and 600 controls matched for gender, age, and neighborhood. The study design was based on two associated historical controls and nine healthy, term babies (Ann. Surg. Oncol. 2007;14:218-21).

The study de- signed was also designed to look at NSAIc use, regardless of frequency, was 18% in melanoma patients, compared with 24.2% in controls.

After adjustment for baseline melanoma risk factors, this translated into a 27% relative risk reduction in conjunction with more than 5 years of aspirin use.

The risk reduction seen with long-term NSAIc use was driven mainly by aspirin use. More than 5 years of aspirin use was reported by 13.3% of the melanoma group and 21.2% of controls. This worked out to an adjusted 44% relative risk reduction.

In a separate presentation, Dr. Maryam M. Asgari presented a prospective cohort study involving 63,809 participants in the National Institutes of Health-sponsored Vitamin and Lifestyle (VI-TAL) study.

On a detailed questionnaire administered at study entry, participants self-reported their NSAID consumption during the prior 10 years. They also listed their melanoma risk factors, including family history of melanoma, a personal history of three or more severe sunburns during ages 10-20 years, having had moles removed, and red or blond hair color.

During an average follow-up of 5 years, 349 new cases of melanoma occurred. After adjusting for melanoma risk factors as well as indications for NSAID use, investigators found no association between melanoma risk and overall use of NSAIcs.

DR. ASGARI

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