Orlando — Fewer than half of childhood cancer survivors who are deemed to be at high risk of secondary breast, colon, and skin malignancies follow cancercare-screening and surveillance recommenda-
tions as adults, according to a new analysis of the large, longitudinal Childhood Cancer Survivors Study.

Skin cancer is the most common rad-
diation-associated second malignancy in survivors, but just 26.7% of 4,833 sur-
vivors at high risk had ever had a com-
plete skin exam, said Dr. Paul Nathan, an oncologist at the Hospital for Sick Chil-
dren in Toronto.

High-risk survivors were the least com-
pliant with colonscopy recom-
dendations: Only 11.5% of 794 sur-
vivors who were considered vulnerable for colorectal cancer had a colonscopy during the 5 years before they were sur-
veyed, Dr. Nathan reported at the annu-
al meeting of the American Society of Clinical Oncology.

With a 5-year risk for breast cancer of more than 5%, these survivors were more compliant with recommenda-
tions, he added; even so, only 46.3% of 521 in this group had a mammogram performed during the 2 years they were asked about screening.

Most of the 8,318 survivors surveyed in this phase of the National Cancer In-
stitute–funded study were in the care of family physicians. About 12.5% had been seen at a cancer center or within a long-
term follow-up program in the previous 2 years. Another 12% reported no med-
care during this time. The remaining patients were “predominantly seen by their primary care physician in their com-
mittee,” he said.

Cancer survivors and their primary care physicians need to be more vigilant, Dr. Nathan said. Better primary care physicians may have only a few childhood cancer survivors in their practice, he said, but they should be made aware of these patients’ special requirements.

“There is broad consensus that sur-
vivors of childhood cancer need regular surveillance and screening in the hope that if we pick up these cancers early, we can change the mortality (and morbidi-
ty),” Dr. Nathan said.

Study coauthor Dr. Charles L. Ben-
nett, professor of geriatrics, economics, and oncology at Northwestern Univer-
sity, Chicago, was unsure whether sur-
urvivorship care was the responsibility of oncologists or primary care providers but suggested it is most likely a shared re-
ponsibility.

This study is im-
portant because “surveillance is es-
ternal, yet empiri-
cal data are lack-
ing,” Dr. Bennett said, adding that “these are real is-
sues. These are lifelong concerns.”

With a 5-year survival rate of 80% for pediatric cancers, most patients survive for a long term (J. Clin. Oncol. 2009;27:2308-
18). Dr. Nathan estimated that about 9% of 325,000 survivors of childhood cancer who are alive in the United States will develop a new malignancy within 30 years of their original diagnosis. In ad-
dition, secondary malignancies are the leading cause of death among survivors who live at least 20 years beyond initial diagnosis.

The Childhood Cancer Survivors Study enrolled 20,602 people who were initially diagnosed with cancer in 1970-
1986 and had survived at least 5 years. Of these original participants, 3,305 had been lost to follow-up and 1,541 had died by the time of the 2003 follow-up survey, on which the new study is based. Another 3,951 declined to participate in the survey and 990 were excluded from the analysis (among them, 960 survivors who had al-
ready developed a secondary malignan-

gy). The average age of survivors inter-
viewed was 31.2 years. A matched group of 2,661 siblings and 8,318 population controls was also assessed.

The study’s primary aim was to de-
termine adherence to the Children’s Oncology Group’s guidelines for fol-
lowing survivors of childhood cancers. Survivors were considered at high risk for the following:

◆ Skin cancer, if they were exposed to any radiation during childhood. An an-
nual skin examination of treated areas is recommended. (“We know the rate of nonmelanoma skin cancers in ir-
radiated areas is approaching 7% for survivors over 30 years,” Dr. Nathan noted.)

◆ Breast cancer, if they received 20 Gy or more of ra-
diation therapy to the breast during childhood. Mammog-
raphy is recommended every 1-2 years begin-
ing at age 25 years, or 8 years after the initial cancer diagnosis for these patients.

◆ Colorectal cancer, if they received 30 Gy or more of radiation to the abdomen, pelvis, or spine. Screening colonoscopy is recommended every 5 years starting at age 35 years.

In a secondary analysis, the researchers compared survivors who were not at high risk of secondary cancers with matched controls from the National Health Interview Survey of the general popu-
lation to determine adherence to U.S. Preventive Services Task Force can-
cer screening guidelines for breast, colon, and cervical cancer.

They found that these survivors were more likely to undergo recommended mammography (67%, vs. 58% of con-
trols), were more compliant with Pap smear recommendations (82% vs. 70%), and had a comparable—albeit low—rate of recommended colonoscopy (24% in both groups).

Predicators of adherence to the skin examination were care at a cancer cen-
ter (RR, 1.35) and the survivor’s having a treatment summary (RR, 1.30). Being a nonwhite patient was associated with a lower likelihood of adherence to the skin examination guideline (RR, 0.63), he reported.

Significant predictors of adherence to mammography were older age at inter-
view (RR, 1.09) and care at a cancer cen-
ter (RR, 1.70).

Older age at the time of the interview was the only significant predictor of colonoscopy adherence (RR, 1.08).

The investigation was limited by the fact that the cancer diagnoses occurred from 1970 to 1986 “and clearly therapy has changed,” Dr. Nathan said. Investi-
gators are recruiting another 20,000 adult survivors who were treated as children between 1987 and 1999 to ask similar questions of a more contempo-
rary cohort.

The study population also will in-
clude more minorities. About 89% of survivors in the current study are white non-Hispanics.

As survivors of childhood cancer live longer, increasing attention is being paid to the long-term effects of therapy. A key ques-
tion is whether changes at the time of therapy administration will have an impact on these downstream adverse ef-
fects. A consortium of institutions is planning intervention studies to address such questions and to see whether using innovative methods to educate patients about their follow-up needs will make a difference, Dr. Nathan added.

Dr. Nathan reported having no rele-
vant conflicts of interests to disclose.

To view a video interview of Dr. Nathan, go to www.youtube.com/ watch?v=a7C1aCgPAlE&feature=channel_page.

Consistency Is Key to Securing High-Quality Mohs Photos

By Alicia Ault

Austin, Tex. — Getting good, consistent pre- and postoperative photos of Mohs procedures is crucial to document re-
commendations and procedures and ensuring those procedures and outcomes with colleagues.

Dr. Juan-Carlos Martinez of the Mayo Clinic in Jack-
sonville, Fl., shared tips on getting the best pictures at the annual meeting of the American College of Mohs Surgery. “Mohs surgeons make a living out of striving for perfection,” he said, adding that “photographs can and should reflect those same qualities,” including be-
ing meticulous, thoughtful, and consistent.

Consistency, especially, is key. Ideally, the only differ-
ence between the preoperative and postoperative pho-
tos should be the surgical intervention, said Dr. Martinez.

The standard for photography is to have a dedicated studio, but this is an expensive undertaking. Although photographs might not turn out as well without such a studio, the advent of digital photography has simpli-
fied image acquisition and management, making it much easier to obtain high-quality, reproducible pho-
tographs, he said. There are some simple tools that can make this task easier: a felt-covered foam board for a background and a digital camera with at least 7 megapxi-
els of resolution. The felt board can be purchased online or made from materials obtained at a local hardware store. The camera can be a dig-
tal single lens reflex (SLR) or a point-and-shoot model.

The same camera should al-
ways be used. It’s also impor-
tant to always use flash to main-
tain consistent lighting.

To frame the photos and keep up the consistency, use anatomical landmarks. The pa-
tient should always be sitting up upright, in front of the felt board, looking straight ahead. A neutral expression is best, since smiles are hard to reproduce on a consistent basis. Gently closed eyes can help avoid the distraction of inconsistent sideways glances, said Dr. Martinez.

Some cameras have a viewfinder grid, which allows better framing. Dr. Martinez uses a horizontal line across the pupils to ensure there is symmetric framing for the frontal, oblique, and base views. For an oblique view, he uses the same horizontal line across the pupils to ensure there is symmetric framing for the frontal, oblique, and base views. For a lateral view, he employs a single hori-
zontal line from the lateral can-
thus to the top of the auricular helix as a vertical line from the brow to the chin. The goal is to ensure that no aspect of the contralateral brow is in view.

The base view is preferred by pro-
essional photographers, said Dr. Martinez, noting that it’s nicknamed the “view of shame.” He will highlight the slightest tip or alar distortion resulting from a reconstruction. It is useful for any tumor on or near the nose. Any nasal reconstruc-
tive paper or presentation should include this view.

Dr. Martinez reported no conflicts.