

Skin Diseases Get Misdiagnosed in Primary Care

BY ERIK L. GOLDMAN
Contributing Writer

NEW YORK — Many primary care physicians are evaluating skin disorders and often relying on general pathologists to make dermatologic diagnoses, which, according to Dr. Clay Cockerell, could be a recipe for disaster.

Non-dermatologists referring skin samples to general pathologists for evaluation is like “the blind leading the blind” and often leads to misdiagnosis and poor patient care, said Dr. Cockerell at the American Academy of Dermatology’s Academy 2007 meeting.

Dr. Cockerell, a dermatologist at the University of Texas Southwestern Medical Center, Dallas, said that only 35% of all skin biopsies come from dermatologists. On a day-to-day basis, dermatologists may do a lot more biopsies than their primary care counterparts, but in terms of sheer numbers, primary care physicians are doing vastly more. In addition, economic pressures may be pushing more primary care doctors to work up patients with skin diseases that, in the past, they would have referred to dermatologists.

There also is a shortage of dermatopathologists across the country. Dr. Cockerell said that the majority of young people entering the field are general pathologists looking to specialize.

The problem is that many general pathologists think that all histologic diagnoses are incontrovertible, and that what’s on the slide is all that matters, he said. However, one facet of dermatology that makes it different from many other specialties is that histologically, the same disorder can look very different, depending on the anatomic site involved. The skin on certain body parts, like the elbows, knees and breasts, or any acral skin, can look and behave quite differently from skin of the arms, legs, face, or trunk. Lesions in these sites often do not show the classic textbook histology for the given disease. This is the

sort of specialized expertise that primary care physicians and general pathologists often lack.

He described two cases in which lack of dermatologic expertise on both sides of the slide led to an incorrect or delayed diagnosis.

The first case involved a 65-year-old woman who came to a family physician with a solitary skin lesion. The physician, thinking it might be a basal cell carcinoma, took a shave biopsy and submitted it to a general pathology lab. The pathologist noted epidermotropism, exocytosis with atypical lymphoid cells, and a “predominance of T cells,” leading to a diagnosis of “probable mycosis fungoides.”

The primary care physician informed the patient about this diagnosis, and she immediately hit the Internet to learn more. Not surprisingly, the information she found was extremely upsetting, and—wisely, as it turns out—she sought out a second opinion. Dr. Cockerell and his colleagues looked at the lesion, which was not at all suggestive of mycosis fungoides, and then reassessed the histology. Their conclusion: benign lichenoid keratosis.

The second case involved a 36-year-old woman who had gone to a local primary care doctor for evaluation of a chronic, unresolving rash. The general pathologist who evaluated the histology came to a diagnosis of cutaneous lymphoma, which prompted a referral to an oncologist.

The woman underwent two courses of chemotherapy, which did seem to resolve the rashes immediately posttreatment. But they recurred shortly after each treatment, which struck the oncologist as atypical. The oncologist sought further intelligence at a skin tumor conference, and ultimately sent the patient to Dr. Cockerell for evaluation.

What he saw were erupted papules with necrotic areas. The histology showed a lot of atypical lymphoid cells, “but clinically, this did not really look like lymphoma. It turned out to be lymphomatoid papulosis.”

The patient was promptly treated with PUVA, leading to a complete remission.

While Dr. Alex Krist, of the Virginia Commonwealth University department of family medicine, admits that the cases presented by Dr. Cockerell are concerning, he sees things differently. The management of dermatologic conditions is an integral part of primary care training, said Dr. Krist. Family physician residents have to fulfill many requirements to make sure they are proficient in the management of skin conditions. Part of the training is knowing when you can handle dermatologic conditions on your own, and when they need to be referred out.

In a study conducted by Dr. Krist and his colleagues, it was found that family physicians are just as good at managing skin conditions as dermatologists. The researchers photographed the patients, made a diagnosis and a management plan, and followed the study patients for 4 months. Two dermatologists then reviewed the patient cases (*J. Fam. Prac.* 2007;56:40-5).

While the study did not focus on skin cancer diagnosis, “I view [primary care physicians] as knowing what they can manage and how to help people find assistance when they need something more. If I have [patients] with melanoma, I will get them in to see a skin specialist. My role is initial diagnosis.”

When it comes to physicians sending biopsies to general pathologists, the issue goes beyond physicians not knowing about dermatopathologists, said Dr. Cockerell. Many insurance companies have specific contracted labs to which samples have to be sent. “I send samples to dermatopathologists when a second review is warranted.”

Also, added Dr. Krist, “Most of my patients have acute skin conditions that need to be dealt with in a couple days.” Referring them to dermatologists could take 4-6 weeks. Even in cities where dermatologists are prevalent, there are not enough of them to handle all the skin conditions that patients present with,” he added. ■

Leafy Vegetables, NSAIDs May Prevent Recurrent Skin Cancer

BY BRUCE JANCIN
Denver Bureau

AMSTERDAM — Adoption of a diet rich in leafy green vegetables and the regular use of NSAIDs are evidence-based supplementary measures available to patients with prior skin cancer to reduce their risk of future episodes, Dr. Adele C. Green said at the 11th World Congress on Cancers of the Skin.

Diet and NSAIDs join regular daily sunscreen use as three secondary prevention strategies that can be offered to patients beyond the prevention mainstay, which remains physical sun



avoidance, added Dr. Green, head of the cancer and population studies group at Australia’s Queensland Institute of Medical Research, Brisbane.

The supporting evidence for these three supplementary preventive measures comes from the prospective community-based Nambour (Queensland) Skin Cancer Study, in which 1,621 adults in the town of Nambour were randomized to daily use of a broad-spectrum SPF 17 sunscreen, or discretionary and less frequent use. The evidence for reduced squamous cell carcinoma (SCC)

risk based upon food consumption patterns comes from the prospective observational portion of the Nambour study. Participants completed a detailed semi-quantitative food frequency questionnaire addressing their consumption of 38 food groups on three occasions during follow-up. In a multivariate regression analysis adjusted for sunscreen use, skin color, and other potential confounders, a

The reduction in risk was associated with eating green leafy vegetables, such as spinach and lettuce.

DR. GREEN

dietary pattern featuring rich consumption of meats and fats was associated with a significant 1.8-fold increased risk of developing SCC during 10 years of follow-up. Moreover, in subjects with a baseline history of skin cancer, being in the top tertile in terms of the meat and fat dietary pattern was associated with a 3.4-fold increased risk of SCC, compared with those in the lowest tertile. Other components of the meat and fat dietary pattern commonly included beer, potatoes, eggs, and white bread.

In contrast, dietary pattern had no effect at all on the risk of developing basal cell carcinoma.

Participants in the highest tertile in terms of the vegetable and fruit dietary

pattern—which also included fish, whole grain breads, legumes, and rice—had a 54% reduction in risk of developing SCC, compared with those in the lowest tertile. “Upon further analysis, this was totally explained by the consumption of green leafy vegetables, like spinach and lettuce, with no added value [found in] the other components of the diet,” according to Dr. Green.

The NSAID analysis in the Nambour study was prompted by an anecdotal observation.

“We noticed that people taking NSAIDs or aspirin for, say, arthritic conditions seemed

to have smoother skin than their colleagues who were not. So we looked at this more formally in our study population,” she explained.

The NSAID analysis took the form of a nested, longitudinal, case-control study involving 86 participants with SCC and 187 randomly selected age- and gender-matched controls. It showed that individuals with SCC were less than one-tenth as likely as controls to have taken an NSAID tablet or at least 200 mg of aspirin eight or more times per week for more than 1 year. Those with SCC were also only one-fifth

as likely to have used NSAIDs or aspirin two or more times per week for more than 5 years.

Among subjects without SCC, current users of NSAIDs or aspirin two or more times per week had half as many actinic keratoses compared with nonusers, Dr. Green said at the congress cosponsored by the Skin Cancer Foundation and Erasmus University.

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DR. HALPERN

increased cardiovascular risk associated with NSAIDs, it’s often forgotten that, well beforehand, multiple randomized trials were underway looking at NSAIDs for prevention of various forms of cancer.

“Some of us have seen patients in our own practices who actually seem to have had cancers go away with NSAIDs. I’m completely on the same page as Dr. Green on this,” said Dr. Halpern, chief of the dermatology service at Memorial Sloan-Kettering Cancer Center, New York, and cochairman of the National Council on Skin Cancer Prevention. ■



In an interview, Dr. Alan C. Halpern pronounced the NSAID findings particularly interesting as well as biologically plausible. He noted that with all the negative headlines about the