Why shouldn’t general pathologists analyze skin biopsies?

I read with interest the article in the March issue by Dr. Gary Fox (“10 derm mistakes you don’t want to make”), who makes some excellent points about evaluation and diagnosis of skin disorders. However, I was greatly concerned about his comments regarding “Mistake #4—Assuming that pathology is a perfect science.” In his Quick Tip on page 165, he makes the recommendation that all skin biopsies be sent to a dermatopathologist.

With the stroke of a pen, he dismisses the skills, abilities, knowledge, training, and experience of the estimated 20,000 board-certified general pathologists in the United States.

The ability to interpret and diagnose skin specimens is an integral part of the training of the general pathologist, and is a component of their evaluation for certification by the American Board of Pathology. Many general pathologists have been providing successful dermatopathology services to their physician colleagues for years. Undoubtedly, occasional cases will require additional expertise, but part of the training and responsibility of a general pathologist is to recognize and refer such cases appropriately.

Dr. Fox’s argument is a double-edged sword, especially regarding family practitioners. One could argue from his viewpoint that if all skin biopsy interpretations and differential diagnoses are themselves so esoteric as to warrant direct referral to a dermatopathologist, would it not also be to the patient’s advantage to be seen initially directly by a dermatologist with more training and experience in cutaneous disease than by a family practitioner? Of course not!

Furthermore, pathologists have subspecialty certification fellowships available not only in dermatopathology, but also in areas such as cytopathology, hematology, immunopathology, and molecular genetic pathology—to name a few. Should family physicians insist that abnormal Pap smears be read only by subspecialty boarded cytopathologists, or peripheral blood smears reviewed only by subspecialty boarded hematopathologists? Of course not!

What must remain the focus in the diagnosis of cutaneous lesions is the correct diagnosis and optimal care of the patient. These objectives require good clinical history, adequate biopsy, and perceptive pathologic interpretation. Challenging or clinically unusual cases require communication about the issues and concerns, which may indeed require specialist referral. But do not be misled into believing that your worries are over by following Dr. Fox’s recommendation to “Send all ‘skin’ to a dermatopathologist.”

I would urge family practitioners to discuss these issues with their local general pathologists. Good communication will go a lot further than will Dr. Fox’s specious recommendation.

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Reference

Dr. Fox responds
I welcome Dr. Wiese’s opinion and offer my own in continuation of the conversation.

For a number of reasons, I would not
compare family physicians’ assessment of skin lesions with that of pathologists. For a lesion with dubious clinical character, it should not matter who recognizes it as such. Once such a lesion is recognized, only one choice remains: Cut it out.

The issue is: Then what? Histopathology is considered the “gold standard.” Because the pathologist’s word will usually be taken as “gospel,” and may determine subsequent surgery and even life and death, one wants to assure the most accurate answer.

For “simple, routine” things, there is no issue.

However, when it comes to clinically questionable melanocytic lesions, a clinical conundrum I face multiple times daily, a quote from an editorial by H. Peter Soyer et al says it all: “The boundary between benignity and malignancy is not as sharp as our mental categories would like it to be. … Pathologists … have been regarded to be more scientific than many of their colleagues. A mystic perversion of this assumption prevails among those clinicians who believe that the pathologist, given only a piece of the patient’s tissue, has all the other ingredients necessary to produce a statement of absolute truth at the end of his report. More dangerous to mankind is a pathologist with the same concept.”

In my article, I cited references—bolstered by experience—that even expert dermatopathologists exhibit substantial interobserver variation. Because of the imprecision, “severely dysplastic nevi” (severe architectural disorder, severe melanocytic atypia, or both) are usually treated similarly to melanoma in situ (full thickness excision with minimum 5-mm margins). I like the comfort of conveying to my patients that in such cases, an expert dermatopathologist (often 2) has interpreted their slides. In fact, to help improve diagnostic accuracy in histopathology of melanocytic lesions, it has even been suggested that dermatopathologists use ex vivo polarized dermoscopy.

There are 2 paths to dermatopathology, one of which is dermatologists who subspecialize. When I have lesions of particular interest, I send my dermatopathologists dermoscopic photographs, because these are meaningful to them. The thought would not cross my mind to send clinical/dermoscopic photographs to general pathologists.

Furthermore, dermatologists may have sufficient knowledge of the pathology to review slides themselves and make judgments. Family physicians are not likely to have the background to review slides themselves and are going to be fully reliant on the pathologist and the report. My suggestion is to get the best expert advice when there can be substantial, clinically important disagreement among the best of the best.

Clinically, the issue often is not benign/malignant, but “What is it?” A dermatopathologist is better equipped to assist in an expanded “skin” differential diagnosis, in my experience.

I try to avoid skin biopsies when not necessary. When they are necessary, it is because I need assistance. I consider my dermatopathologists full-fledged consultants in my skin practice. For the same price, in the same time frame, I can have the expertise of a dermatopathologist for my skin biopsies. Why should I not avail myself of that? If I were to daily deal with kidney, liver, thyroid, brain, bone, lung, adrenal, pancreas, gut, etc, I would become friendly with my knowledgeable and well-trained general pathologist.

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References