PEARLS FOR THE PRACTITIONER

Clinical Photographs Should Accompany Skin Biopsies in Many Instances to Improve Patient Care

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The practice of dermatology has changed dramatically over the last 30 or more years since I began practice. The vast majority of patients who went to a dermatologist's office were seen and treated by a board-certified dermatologist. Dermatologists had the freedom to submit their skin biopsies to whomever they chose with no interference from third-party payers or organizations such as hospitals or private equity groups who might own their practices. Most dermatologists were taught that performing punch biopsies was the preferred method for sampling inflammatory skin diseases and that incision, deep saucerization or excision techniques were to be used for sampling neoplasms. For many reasons such as progressive cuts in reimbursement, dermatologists have had to leverage their time by hiring non-physicians to extend their time for their practices to remain profitable. Others have chosen to add additional services to their practices such as cosmetic dermatology which may cause them to have less time to spend on routine things such as evaluating potential neoplasms. While many extenders who send specimens to our laboratory are among the best clinicians we serve, others have had less training and are not skilled in the performance of skin biopsies with limited ability to provide clinical information.[1] Furthermore, patients with skin diseases may be evaluated by physicians with little or no training in dermatology.

The clinical information submitted for the dermatopathologist to use to correlate with the histologic findings is often woefully inadequate.[2] Inflammatory dermatoses, often widespread with unusual patterns challenging even to a seasoned expert, are commonly submitted as "rash." Neoplasms are commonly submitted with a diagnosis of "neoplasm of uncertain behavior" when the differential diagnosis includes serious conditions such as melanoma. In many cases, this is because reimbursement from third party payers differs between benign and malignant diagnoses and keeping the diagnosis unclear until the histologic diagnosis is rendered allows the charge to be submitted as a benign or malignant process. Many of these clinical diagnoses are generated robotically by an electronic medical record (EMR) that offers a menu of phrases to be applied to any lesion. We receive requisitions from some practices where all melanocytic lesions are submitted as "irregular multi-colored lesion. R/O MM." In many of these, the diagnosis is a banal intradermal nevus so that it would have been impossible for it to have simulated melanoma. In other cases, especially from non-dermatologists, an ICD-

10 code is written on the requisition form with no description at all. In others, no clinical information is submitted other than the patient's name and insurance information. Thus, the fundamental hallmark of accurate diagnosis in dermatology, clinicopathologic correlation, has been steadily eroding which has been documented on more than one occasion.[2]

While this may seem like an unfortunate and perhaps inevitable development, it has significant consequences for patients and clinicians who may find themselves in medico-legal jeopardy from delay in or failure to make accurate diagnoses. Furthermore, with the advent of online reviews, they are placing themselves at risk for patients complaining about their practice with attendant negative consequences, especially if they are not able to establish a diagnosis or require the patient return repeatedly for additional biopsies increasing cost and inconvenience. While these are adverse consequences for clinicians, there are also negative, and in many cases, unacceptable, consequences for hapless patients who may be harmed significantly.

Fortunately, there is a potential escape from this morass via clinical photography. The ideal way for an accurate diagnosis to be made is for the patient to be examined in the context of histologic findings. This classic "CPC" was the tradition of clinical diagnosis for many years where clinical features of a disease were correlated with anatomic features at autopsy. In dermatology, rather than the specimen at the morgue, the clinical features of the disease are those presenting in the patient in the dermatologist's office and the pathology is represented in the skin biopsy rather than the autopsy. Given that the dermatopathologist rarely has access to patients, clinical correlation has traditionally been performed via the information provided on the pathology requisition form. With the increasing adoption of EMR systems, that information has become progressively less useful so that a better way for clinicians to communicate is via clinical photography. Because digital photography is now so readily available, inexpensive and simple to transmit, it should be available in any challenging case and submitted to the dermatopathologist at the time of the skin biopsy.

It is not necessary to submit photographs in all cases such as every potential basal cell carcinoma or intradermal nevus. However, a case could be made for at least photographically recording every skin lesion or condition at the time of biopsy in case histologic features prove to be challenging or do not correlate with clinical features. I have seen amelanotic melanomas submitted as "rule out BCC," and when the clinician was notified, they described the lesion as a nondescript pink papule or nodule. I have lesions submitted as "seborrheic keratosis" found to be melanoma when examined histologically. I have also witnessed cases of alleged medical negligence where an erroneous histologic diagnosis was rendered that would have been averted had a clinical photograph been available for review.

How should photographs be submitted? Ideally, images should be taken with a high-quality digital camera with excellent lighting. Images taken with a smartphone, while less preferable, may still be valuable, however. In the case of neoplasms, a dermatoscopic image can be useful. Digital images must be transmitted using secure encryption but if that is not possible, submitting images that have been de-identified so that patient privacy is not compromised can be submitted by email or

text. Finally, if it is not convenient to submit clinical images digitally, a print photograph can be provided. While a series of pictures is preferable to a single one, anything is usually better than nothing as images allow the dermatopathologist to perform better clinical correlation.

Some referring clinicians have inquired if images stored in an EMR can be submitted. While this would be convenient, unfortunately, many EMR companies do not provide this feature or charge high fees making it a financially unrealistic for most. Perhaps if dermatologists advocated stridently for this, it might be provided more readily.

This could transform dermatology and dermatopathology at least to a degree. Dermatopathologists would be expected to use their clinical diagnostic skills for pathologic correlation to render a diagnosis on the spot. The practice of "punting" the diagnostic process back to the clinician would become far less acceptable. Dermatopathology fellows with training in pathology would have to work extra diligently in their fellowships to develop clinical dermatology skills as they will be expected to perform as well as those trained in dermatology residencies.

Our goal is to provide the best care for our patients and when technologies become available that makes us better, we are obligated to employ it. One has now become available that allows us to provide better care. The time has come for clinicians to use photography liberally by submitting photographs to dermatopathologists just as they do with their biopsy specimens. Let's start delivering better patient care through photography!

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