How informative are dermatopathology requisition forms completed by dermatologists? A review of the clinical information provided for 100 consecutive melanocytic lesions

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Background: Accurate clinicopathologic correlation can be crucial to arriving at the correct microscopic diagnosis.

Objective: We reviewed the clinical information provided on the dermatopathology requisition forms for melanocytic lesions submitted by community dermatologists.

Methods: The clinical information provided and the microscopic diagnoses rendered were recorded in a retrospective, unblinded fashion for 100 consecutive melanocytic lesions submitted as wet tissue to our dermatopathology department.

Results: Biopsy specimens were received from 60 community dermatologists and 5 nurse practitioners/physician assistants. Clinical morphology (ie, papule) was provided in 33% of cases. With respect to the ABCDE criteria, 55% of cases had none, 12% had one criterion, 21% had two criteria, 10% had 3 criteria, 2% had 4 criteria, and none had all 5 criteria. No forms stated whether the biopsy specimen was a partial or complete sampling of the lesion. Asymmetry was provided 4% of the time, border irregularity 8%, color 39%, diameter 22%, and evolution 10%. A family or personal history of melanoma was provided in 8% of cases. No requisition forms mentioned the "ugly duckling" sign. Dermatoscopy information and a clinical photograph were provided once each. In 19 cases, the only information on the requisition form was one of the phrases: "r/o atypia," "r/o atypical nevus," "r/o Clark's," or "r/o dysplastic nevus." In 10 cases, the only information was "r/o nevus."

Limitations: Only 100 consecutive melanocytic lesions were studied in a retrospective, unblinded fashion.

Conclusion: Important clinical information regarding pigmented lesions is often not provided on the requisition form. Potential reasons for this deficit and suggestions for improvement are discussed. (J Am Acad Dermatol 2010;62:257-61.)

Key words: clinicopathologic correlation; melanocytic lesions; pathology requisition form.

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Accurate clinical information provided on dermatopathology requisition forms is often crucial to arriving at the correct microscopic diagnosis. This is particularly important in melanocytic lesions, in which sometimes subtle microscopic findings must be interpreted in the context of the clinical information. In addition, when the biopsy specimen provides only a portion of a larger melanocytic lesion, it is especially useful for dermatopathologists to be alerted to this clinical context and to the possibility of sampling error.

A number of studies have evaluated the clinical diagnostic accuracy of dermatologists as compared

with nondermatologists using the information provided on the pathology requisition form.[1-3] In addition, some articles have suggested which clinical information should be provided in the pathology requisition form, including demographics, description of the clinical morphology, duration, other diseases, diameter of the lesion, and the clinical differential diagnosis.[4-6] We sought to evaluate the clinical information actually provided on the dermatopathology requisition forms for a series of 100 consecutive wet tissue specimens of melanocytic lesions submitted to our laboratory.

CAPSULE SUMMARY

- Adequate clinical information may be crucial to correct pathologic diagnosis of melanocytic lesions.
- Sampling of 100 consecutive requisitions from biopsy specimens of melanocytic lesions submitted by dermatologists revealed important shortcomings in communication between dermatologists and dermatopathologists.
- In our experience, the most useful clinical information to be communicated to dermatopathologists regarding melanocytic lesions includes lesion size, whether the lesion has previously been biopsied or traumatized, and whether the biopsy specimen represents only a partial sample.

METHODS

We reviewed the clinical information provided and the microscopic diagnoses rendered in a retrospective, unblinded fashion for 100 consecutive melanocytic lesions submitted as wet tissue specimens to our dermatopathology laboratory in July 2008. Specifically, we recorded the submitting health care provider's name, the patient's age and sex, lesion site, and morphology (eg, papule, macule, plaque). In addition, we recorded whether a comment was added regarding asymmetry, border irregularity, color or color variegation, diameter/size, and evolution of the lesion. We also recorded whether there was any additional history provided on the form including a personal or family history of melanoma or prior therapy, trauma, or biopsy of this site. If dermatoscopic findings or a clinical photograph were included, that was noted as well. Finally, the type of specimen obtained (eg, punch biopsy, oriented excision), the clinical differential diagnosis provided, and the histopathologic diagnosis were recorded.

We arbitrarily began with case number 08-50,000 (which was collected on July 17, 2008) and reviewed the pathology reports of the next 100 melanocytic lesions that were sent in as wet tissue specimens from outside (community) dermatologists. We chose not to include slide consults submitted to us because these often include the submitting clinician's (either dermatologist or pathologist) pathologic interpretation rather than the clinical information, and consultation cases tend to select for more complicated and/or suggestive lesions. In addition, we chose not to include wet tissue specimens submitted from the dermatology clinics at our university because these are most often performed by residents who are continuously educated and reminded of the importance of providing appropriate clinical information on the requisition form. In selecting for only wet tissue specimens sent from community dermatologists, we aimed to obtain the most accurate reflection of a general dermatopathology practice. Finally, because some patients had multiple specimens sent on a given day, we arbitrarily chose to only record the clinical information on the first melanocytic lesion received, based on alphabetical designation by the clinician. We noted that when multiple specimens were submitted, the requisition forms tended to present the same amount of clinical information for each lesion (ie, they either commented on the diameter and other features for all of the lesions or none of them).

RESULTS

All of the wet tissue specimens were taken from private dermatology offices. Specimens were submitted by 60 dermatologists, two physician assistants, two nurse practitioners, and one provider with both physician assistant and nurse practitioner degrees. All 100 cases specified the patient age, patient sex, and site of the lesion on the requisition form. The mean patient age was 43 years (range: 15-85 years). There were 58 female and 42 male patients. In all, 57 lesions were from the trunk, 19 from the head and neck, 13 from the lower extremities, and 11 from the upper extremities.

No information was provided regarding the clinical morphology for 67 of the 100 lesions. Of the remaining 33 lesions, 18 were macules, 10 were papules, two were listed as "macule/papule," two were plaques, and one was a patch. There were 52 shave biopsy specimens (defined by us as ≤ 1 mm in depth on gross measurement), 25 punch biopsy specimens, 13 saucerization biopsy specimens (defined by us as >1 mm in depth on gross measurement), 8 unoriented excisions, and two oriented excisions.

Table I lists the frequency of the clinical criteria reported for the 100 lesions. Table II lists the clinical