

THE IMPORTANCE OF QUALITY & COLLABORATION IN DERMATOPATHOLOGY

What do experts think about the quality of a dermatopathology group versus a single dermatopathologist?

"I would definitely send to a group of dermatopathologists rather than one dermatopathologist and here's why. This is a field that is often not black-and-white, especially with difficult melanocytic lesions where a second opinion is crucial. Doctors who practice on their own also often don't show cases around as much as they should and thus miss important diagnoses, either by overcalling or undercalling. They may also chronically overcall to avoid litigation, which means more unnecessary procedures for the patient. Also, a DP associated with a pathology group may try to get around this by showing cases to surgical pathologists, which is not the same thing as showing to another dermatopathologist. You are better off sending to a group of experienced dermatopathologists who routinely show their cases around, as the Miraca pathologists do."

- Uma Sundram, MD PhD,
Former Director,
Dermatopathology Fellowship
Program at Stanford

Why is quality so critically important?

A missed diagnosis of melanoma is the second most common cause of litigation in pathology-related malpractice claims. Melanoma is particularly high risk because (1) melanocytic lesions are one of the most common neoplasms in humans; (2) melanoma is one of the most lethal malignancies; (3) distinguishing between benign and malignant melanocytic lesions can be extremely difficult, even for the most highly skilled dermatopathologist; (4) melanoma causes more years of lost life than any other malignancy except leukemia.^{1,2}

A mistake made by the dermatopathologist will result in liability for the dermatologist as well, as the dermatologist is held responsible for their choice of consultant. The American Society of Dermatologic Surgeons states that a physician should choose "pathologists who will provide the best possible result for their patients." According to the AMA Code of Ethics, "The physician who disregards quality as the primary criterion is not acting in the best interests of the patient."

What is the standard of dermatopathology care in Central NY?

Overwhelmingly, dermatology practices in Central New York as in the rest of the United States send their dermatopathology specimens to an expert dermatopathology group. The only major exception is when the dermatologist reads his or her own slides or when there is an in-house dermatopathologist (there is an ongoing push in the pathology community to close this so-called Stark Loophole to prevent practices from sending their specimens to labs in which they have a financial stake).³

Dermatopathology is an Integral Part of a Dermatologist's Service

Dermatopathology is a professional or consultation service rather than a quantitative laboratory test [However, it is not like other physician referrals since patients aren't going to another office]. Dermatopathologic interpretation is an integral part of a dermatologist's service to his or her patients. Failure to interpret skin biopsy specimens correctly can mislead the clinician, can interfere with institution of appropriate medical or surgical therapy, and may thus potentially cause harm to the patient (AAD Position Statement).

Does our membership in CAP necessitate that we internally refer to a CAP Member?

As an ACO, CAP is expressly prohibited from requiring internal referrals. Also, there is no requirement by the FTC that CIN providers refer within the CIN. Furthermore, internal referrals under certain circumstances such as when the CIN has significant market share (i.e. most if not all other pathology in CAP is sent to CMC) raises questions of anti-competitive activity.⁴

1. Troxel DB. Error in surgical pathology. Am J Surg Pathol 2004;28(8):1092-1095.

2. Albert VA, Koh HK, Geller AC, et al. Years of potential life lost: another indicator of the impact of cutaneous malignant melanoma on society. J Am Acad Dermatol 1990;23(2 Pt 1):308-10.

3. LeBoit PE. Fire Your Dermatopathologist! Arch Dermatol 1999;135:137-138.

4. <https://www.folev.com/cms-releases-final-aco-rules-implementing-the-medicare-shared-savings-program-11-01-2011/>

Quality in dermatopathology can be measured by three major metrics: Accuracy, Timeliness, and Completeness.⁵

An expert dermatopathology group such as Miraca Life Sciences is superior to a single dermatopathologist in all three quality metrics:

1) Accuracy

- a. Accuracy improves with collaboration
 - i. Nearly 100% concordance rate of Miraca diagnoses with second opinions from academic institutions
 - ii. Second opinions – Routinely performed on difficult cases, proven to improve diagnostic accuracy
 1. Second opinions prevented significant misdiagnosis in 27% of cases in a study involving 1887 lesions submitted for consultation to an expert panel⁶
 2. A melanoma referral center in CA found a discordance rate for melanoma diagnosis of 15% in cases sent to them in consultation. 31 of the 56 (55%) misdiagnosed melanocytic lesions were initially evaluated by a dermatopathologist.⁷
 - iii. Acquired pathology group: 56% reduction in errors 6 months after consensus conference instituted
- b. Accuracy improves with commitment to education – like a “Perpetual fellowship”
 - i. Daily consensus conferences, disease-specific reviews prevent diagnostic drift
 - ii. Journal Club, Didactic lectures – improve diagnostic quality and pathologist recruitment
- c. Accuracy improves with volume, as exposure to a high volume of cases allows development of expertise
 - i. Reading too few cases results in lack of exposure to a diverse array of cases and may result in a decreased ability to diagnose challenging cases of uncommon or rare lesions and diseases
 - ii. Evaluating and grading melanocytic lesions accurately requires a high volume of cases
 - iii. Diagnosis of Spitz nevus in an adult is “high risk” due to its histologic similarity to melanoma. If a pathologist is not routinely involved in the interpretation of Spitz nevi, and patient is more than 20 years old, the case should be reviewed by an expert.⁸
- d. Accuracy improves with subspecialist expertise
 - i. Availability of a multitude of subspecialists in dermatopathology
 - ii. Each subspecialist writes the terminology and criteria for their area of expertise
 - iii. All pathologists use the same terminology and criteria as the expert
 1. Allows each patient to benefit from the expert, ensures most specific and accurate diagnosis
 2. Patients benefit from availability of expert consultations (this also promotes cost effectiveness)
- e. Accuracy improves with dedicated and specialized systems: Creation of prepopulated labels and requisition forms within interfaced EMR and Matchmaker® specimen reconciliation tracking system decrease operational errors such as mislabeled or missing sites, mixups of patient specimens, and lost specimens
- f. Accuracy improves with standard and understandable language: Clear communication of results using uniform language in the *Miraca Dermopath Division Terminology and Criterion Database*, which has 1:1 mapping of dermatology terms with pathology terms
- g. Accuracy improves with clinicopathologic correlation: Ability to share office visit and procedure notes as well as clinical photos via interfaced EMR allows for better clinicopathologic correlation and enhanced accuracy⁹⁻¹¹

2) Timeliness

- a. Specialized, highly efficient infrastructure and staffing supports rapid turnaround time
- b. Having group coverage allows for seamless and continuous signout of incoming cases
- c. Availability of second opinions onsite reduces delays in diagnosis (this also promotes cost effectiveness)
- d. Ability to share office visit and procedure notes as well as clinical photos via interfaced EMR allows for more timely signout and fewer clinical interruptions, as many clinical questions can be answered via reading the note and reviewing clinical photos

3) Completeness

- a. New medical knowledge is constantly shared and discussed with colleagues who together determine how to integrate it into their daily practice
- b. Dermatopathology educational conferences held at Miraca yearly
- c. On-site availability of latest special esoteric stains if needed, i.e. Bap-1
- d. Pathologists are readily available to answer clinician questions when there is group coverage

Dermatology Associates of Ithaca

2333 North Triphammer Road, Suite 203
Ithaca, NY 14850

What do experts think about the quality of a dermatopathology group versus a single dermatopathologist?

"I don't think it is ever a good idea for a dermatopathologist to operate in isolation. One needs to have colleagues readily available to bounce ideas off of. I change diagnoses daily, and I change the diagnoses of my partner on a daily basis as well, based on our consultation of the tough cases."

- Abel Jarell, MD, Former Dermatopathology Fellow of Philip LeBoit at UCSF and AFIP Dermatopathologist

"The Miraca Life Sciences diagnostic approach guarantees uniformity of terminology and criteria...and creates an ideal world that is as yet not a reality for many practicing pathologists."

- J Clin Path August 2010

Considering the high level of integration between our practice and Miraca, the services we provide in partnership should be considered in-network

Miraca's services are an integral part of the care that we provide to our patients. It is not just a consultant to whom we are handing off care but a practice partner who works closely with us through knowing our patient population, understanding our practice patterns, and seeing the clinicopathologic picture as described in our notes, who directs our subsequent patient care and workup through a uniform and highly specialized language that is used in their pathology reports as well as through continual two-way communication with our staff at all levels. Although the practice of dermatology is very different from that of any other discipline in CAP, this relationship is most analogous to that of an in-house lab where bloodwork is sent since we work as one interconnected team. Furthermore, Miraca is highly integrated with our EMR as well as with our patient care procedures to such an extent that as we become more clinically integrated with CAP, so will any dermatopathology information that will be needed by CAP to measure quality and outcomes. Without our partnership with Miraca, it would be impossible to provide the same degree of excellence in patient care.

Similarly to in-house labs being regarded as in-network, the services that Miraca and our office provide in partnership should be considered in-network and not as an out-of-network referral since: (1) No patients are leaving the system; (2) We have a highly integrated relationship which will carry over to any patient care standards and metrics that are required of CAP (as long as these do not involve confidential business practices of either Miraca or my practice since we do not have a business relationship but a patient care partnership).

Our practice is entirely committed to clinical integration with other members of CAP, to the fullest extent that is compatible with best practices in dermatology.

5. Nakhleh RE. What is quality in surgical pathology? *J Clin Pathol* 2006 Jul; 59(7): 669-672.
6. Van Dijk MC, Aben KK, Van Hees F, et al. Expert review remains important in the histopathological diagnosis of cutaneous melanocytic lesions. *Histopathology* 2008;52(2):139-46.
7. Shoo BA, Sagebiel RW, Kashani-Sabet M. Discordance in the histopathologic diagnosis of melanoma at a melanoma referral center. *J Am Acad Dermatol* 2010;62(5):751-6.
8. Troxel DB. Pitfalls in the diagnosis of malignant melanoma: findings of a risk management panel study. *Am J Surg Pathol* 2003;27(9): 1278-83.
9. Kerl H and Cerroni L. "Standard of reasonable care" in dermatopathology. *Journal of the German Society of Dermatology*. (2011) 1610-0379/2011/0909.
10. Ferrara G et al. Prior knowledge of the clinical picture does not introduce bias in the histopathologic diagnosis of melanocytic skin lesions. *J Cutan Pathol*, 2015 Aug 13
11. Cerroni L et al. Influence of evaluation of clinical pictures on the histopathologic diagnosis of inflammatory skin disorders. *J Am Acad Dermatol*. 2010 Oct;63(4):647-52.