Histopathologic assessment of atypical pigmented lesions may be a routine process for dermatologists, but the manner in which it is performed can have important implications. A study published earlier this year examined the various factors of histopathologic assessment and the impact they have on all phases of assessment and diagnosis.

While some “preorder” deeper sections in most cases, others favor ordering additional sections only when needed. While some see this purely as a matter of clinical preference, these approaches may yield different outcomes.

**CLINICAL AND FINANCIAL FACTORS**

Although financial considerations should not be the primary concern during histopathologic assessment, the study authors note that in this age of cost-conscious medicine, it’s worth asking if there is a benefit to added costs. After reviewing 204 cases and assigning a preliminary diagnosis, the authors estimated expenses for three scenarios: no additional sections, prospective deeper sections, and retrospective deeper sections.

Diagnoses were modified in nine percent of cases where deeper sections were obtained, which changed clinical management in 56 percent of these cases, according to the authors. They also observed that lesions obtained by punch-biopsy and inflammatory lesions were disproportionately overrepresented amongst cases with changed diagnoses ($p < 0.001$, $p = 0.12$, respectively). The cost of prospective deeper sections and retrospective deeper sections represented a 56 percent and 115 percent increase over base costs, respectively. The authors observed that labor costs, particularly the cost of dermatopathologist evaluation, were the most significant cost-drivers. They concluded that additional sections improve diagnostic accuracy but delay turn-around-time and increase expenditures.

**DISCUSSION**

The study found prospective deeper sections to be cost effective. This raises several important questions and concepts related to assessment. There would appear to be an underlying philosophical question when it comes to depth of tissue. Traditional thought suggests that less tissue ordered means cost efficiency. However, factoring in built-in sampling errors, ordering deeper sections may not only be “safer,” but also cost efficient—particularly when it comes to inflammatory rashes of unknown etiology or significantly atypical pigmented lesions.

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