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Position Paper From the Association of Pathology Chairs: Surgical Pathology Residency Training

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Background

Training in surgical pathology prosection ("grossing") and microscopic diagnosis is an integral part of pathology residency training. New-in-practice and employer surveys demonstrate that surgical pathology is one of the defining activities of most pathologists, even as areas such as laboratory management and molecular pathology are targeted for increased emphasis.[1] The Accreditation Council for Graduate Medical Education (ACGME) accredits programs and assures that the resident training curriculum meets its standards, which include guidelines for surgical pathology training. The ACGME also conducts resident and faculty surveys, and puts substantial weight on resident perceptions expressed in their survey in regards to accreditation decisions, which in turn drives curricular content and structure. The American Board of Pathology (ABP) defines requirements for individual resident board eligibility. Both the ACGME and ABP require that residents are ready for "independent practice" on completion of training (ACGME) and for Board eligibility (ABP).

Current Practice

The ACGME in its standards requires that residents must examine and assess at least 2000 surgical specimens.[2] It further states that there must be an adequate mix of cases, that a microscopic diagnosis must be formulated for the majority of cases examined grossly, and that residents must preview cases prior to sign out with an attending pathologist. The ACGME in its Milestones provides additional guidance on assessment of resident development in surgical pathology.[3] Examples of surgical pathology related Milestones include assessment of grossed specimens demonstrating competency across a range of complex specimens, ability to correctly describe and sample specimens, ability to dictate complete, logical, and succinct gross descriptions, using gross and histologic features to reliably formulate an accurate diagnosis. In its requirements for certification, the ABP does not list specific requirements related to surgical pathology, but states that eligibility for combined anatomic pathology and clinical pathology (AP/CP) certification must include 18 months of structured anatomic pathology (AP) training, and eligibility for AP-only certification must include 24 months of structured AP training.[4]

Issues Related to Current Practice

While grossing and surgical pathology diagnostics are still considered essential activities of practice, as other content is

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added to training, there has been a need to extend available time of both pathologists and residents by hiring support staff, either pathologists' assistants or other trained staff to assist with specimen grossing. The burgeoning training content requirements result in programs looking for the most efficient means of delivering that content, which often results in an increasing number of (required) large lecture format, didactic conferences that pull residents from other patient care activities, and act to de-emphasize professional patient care responsibilities. As academic departments and larger practices attempt to operate with increased efficiency, responsibility for grossing and in many programs training residents in grossing has shifted to pathologists' assistants. Because of these influences, residents may undervalue their grossing experience even though in many practices, the expectation is that the pathologist will gross, and in virtually all practices pathologists will be required to provide supervision of specimen grossing. Focusing on didactics can lead to decreased involvement in patient care activities and problems with readiness to practice independently. This lack of readiness can be especially appreciated in surgical pathology, where new-in-practice surveys raise lack of independent practice experience as a gap in training, and where good models for independent practice in training are not forthcoming in part due to professional billing requirements.

Position of the Association of Pathology Chairs, Supported by the Residency Program Directors Section

1. Grossing in surgical pathology remains an essential pathology practice activity. Detailed understanding of complex specimens, the quality of the dissection and an understanding of where sections are taken are a must. Pathologists must not abdicate responsibility for training and supervision of grossing even when pathologists' assistants are utilized.
2. The ABP should define surgical pathology minimum requirements for certification, including requirements for active participation in and individual responsibility for:
    a. gross prosection and dictation of at least 2000 specimens until competency and readiness to practice independently are achieved
    b. correlation of gross with imaging studies where appropriate
    c. review of gross dictation with a pathologist
    d. preview of microscopic slides
    e. preparation of microscopic diagnosis and findings
    f. clinical–pathologic correlation where appropriate
    g. efficient and appropriate ordering and interpretation of histochemical, immunohistochemical, and molecular studies
    h. review of the surgical pathology diagnostic report with a faculty member
    i. a mix of simple and complex specimens, with a limited number of simple specimens counted toward the numeric requirement.
3. Progressive responsibility in surgical pathology training should better assure readiness for independent practice. This could be accomplished by having advanced residents place preliminary reports on the chart that are later finalized by the attending. Other models where residents generate a final diagnosis either without professional billing or with timely review by faculty might also be considered.
4. Entrustable professional activities (EPAs), defined as activities that residents are able to do day 1 of practice, that are executable, observable, measurable and lead to a recognized outcome, and that reflect and are aligned with current practice patterns, must be developed for surgical pathology inclusive of grossing, using a collaborative approach with representatives from academic and private practice as well as new-in-practice pathologists and pathology employers. Sign off on EPAs should be used by the ABP to determine readiness for certification.[5]
5. The use of number-based criteria as a means to assure competency is extremely problematic. When the above changes have been implemented, the number-based criterion presently in use should be considered the minimum number of cases that must be available to an individual resident in order for a pathology residency training program to be accredited. The actual number of cases required for training an individual resident must be based on the program's evaluation of competency and readiness to perform surgical pathology-related entrustable professional activities on completion of training. Residents are expected to complete additional cases selected to best address gaps in performance until competency is achieved.

Future Practice Overview

Adoption of this position and implementation of the actions described will result in inclusion of important surgical pathology grossing experiences in pathology residency training, which is presently "at risk." Defining clear criteria for board eligibility will help assure that all trainees meet a defined standard and understand the grossing as well as other surgical pathology requirements. Better modeling and inclusion of progressive responsibility and independent practice in residency training will produce new-in-practice pathologists who are ready to practice independently, a critical element in meeting workforce needs and assuring public safety.

Authors' Note

This position paper was reviewed and approved by the 2018-2019 Council of the Association of Pathology Chairs (APC) and the 2018-2019 Council of the Residency Program Directors Section

(PRODS). See www.apcprods.org for a complete list of Council members.

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