Brief Updates in Lung Pathology

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This issue of the Archives of Pathology & Laboratory Medicine brings another installment of the ongoing series titled Top Stories in Anatomic Pathology. Previous editions of Top Stories have presented views and opinions of the faculty of the Department of Pathology at the University of Massachusetts, Worcester, on diverse subjects in our specialty, including cytopathology, genitourinary pathology, breast pathology, and hematopathology.

This month’s top stories are dedicated to pulmonary pathology. Subjects examined by the authors include “Smoking-Related ‘Interstitial’ Lung Disease” by Teri J. Franks, MD, and Jeffrey R. Galvin, MD, and “Malignant Mesothelioma Diagnosis” by Qudsia Arif, MB, BS, and Aliya N. Husain, MD. Timothy Allen, MD, JD, and Yasmeen Butt, MD, discuss the passing of the term bronchioloalveolar carcinoma, whereas Renu K. Virk, MD, and I go over the story of airway-centered, interstitial lung disease.

What are the messages of these stories? Why do these authors feel their stories qualify as top stories? Currently, available data suggest that the extent of lung injury secondary to cigarette smoke is wider than previously acknowledged. In addition to traditional entities, such as emphysema, respiratory bronchiolitis, and desquamative interstitial pneumonia, it is now recognized that cigarette smoke may result in alveolar wall fibrosis, a pathologic change that, in combination with emphysema, may have significant clinical and physiologic implications. In their discussion, Drs Franks and Galvin call attention to this hybrid and less well known, but clinically important, variant of lung injury and suggest the need for further, rigorous, multidisciplinary investigation, which is required to fully understand nontraditional variants of smoke-related lung diseases.

In their review, “The Demise of the Term Bronchioloalveolar Carcinoma” Drs Allen and Butt state. “The term bronchioloalveolar carcinoma serves as a good example of a utile, descriptive term that, over time, with increased understanding, ran its course and attained obsolescence.” Indeed, it took nearly 8 decades for the pathology community at large and pulmonary pathologists in particular to recognize that bronchioloalveolar carcinoma with its reputation as a tumor with a “good prognosis” was in reality a form of in situ carcinoma. With that in mind, Drs Allen and Butt examine new questions resulting from changing terminology (including the meaning of minimally invasive adenocarcinoma) and leave us with a message of the value and importance of using language precisely, particularly in the case of lung tumors, which should have names that closely reflect their clinical behavior.

Drs Arif and Husain examine the ever-timely topic of difficulties that may arise in the diagnosis of malignant mesothelioma, aiming to provide practicing pathologists, who are busy with their daily work, with a one-step approach to making the diagnosis. Drs Arif and Husain first present a basic short list of must-have immunohistochemical markers and then go on to discuss other diagnostic modalities, such as cytogenetics and fluorescent in situ hybridization–related technologies, both of which are rapidly gaining acceptance as valuable tools in the diagnosis of mesothelioma.

Dr Virk and I review the nature and behavior of a relatively obscure variant of idiopathic, interstitial lung disease, whose major histopathologic feature is bronchiolocentricity. Recognizing heterogeneity within this subset of airway-centered, interstitial lung disease, the authors suggest the disorders be separated into 2 subcategories, one showing a greater degree of fibrosis and a poorer outcome and the other showing more inflammation, less fibrosis, and a better outcome.

Relevant contemporary matters related to endocrine pathology will also be forthcoming.

As noted in previous editions of Top Stories, any citation of instrumentation, use of biomarkers, or other products should not be interpreted as endorsement by the Archives. It is hoped that this, and previous editions of peer-reviewed Top Stories, will be useful to the readership, particularly in the setting of their daily practice of pathology.