Whole Slide Images Add Value to Journal Article Figures

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The Archives of Pathology & Laboratory Medicine strives to inform its readers about ongoing and future innovations in pathology. Last year, we added several editorial sections devoted to emergent fields impacting the future of pathology practice. In this issue, the Archives offers a demonstration of digital pathology applied to medical journal article figures, a technological advance that provides added educational value to the figures.

A figure in an article shows just one selected area of a diagnostic slide at one selected magnification. Digital technology offers the reader the opportunity to review the diagnostic slide from which a figure was taken in its entirety and at multiple magnifications, duplicating what the reader would encounter if the slide was an actual case in his or her surgical pathology workload. This affords a more complete context and greater information that is more applicable to real-world experience as opposed to seeing only a limited field that was selected and photographed by the author.

In this issue of the Archives, please see the article “Pulmonary Large Cell Carcinoma Lacking Squamous Differentiation Is Clinico-pathologically Indistinguishable From Solid-Subtype Adenocarcinoma” by David H. Hwang, MD, David P. Szeto, BS, Anthony S. Perry, MD, Jacqueline L. Bruce, PhD, and Lynette M. Sholl, MD. In this article, you can access the scanned whole slide image from which selected figures were photographed and examine the entire slide image at various magnifications as if you were examining the original glass slide on your own microscope.

If you are reading the print version, one option is to type the uniform resource locator (URL) provided in the figure legend into your browser to access the whole slide image. If you are reading the online version, you can directly click your mouse on the hypertext transfer protocol (HTTP) hyperlink to the URL with the whole slide image.

With either the print or online version, you can use your mobile device to scan the quick response (QR) code barcode to access the URL for the whole slide image. For those who are not familiar with this technology, the QR code is the square grid with black dots arranged against a white background found beneath the figures and can be read by an imaging device such as your phone camera. You will need to download a QR reader software application to scan and decode the QR code if you do not already have the software on your mobile device. There may be variation in quality or accessibility depending on the speed and capabilities of your specific mobile device, particularly if you have an older model.

The figures in this article are a demonstration of how digital pathology may be applied to histologic figures in pathology journal articles to supply a more realistic and complete educational experience for anatomic pathologists. The use of new mobile devices allows reading of the article and linking to the accompanying whole slide images in any location where the device can access the Internet. This flexibility and availability, combined with the capacity to learn from the entire slide in a realistic context, opens the door to enhanced journal education in the future.

We welcome your feedback about this demonstration. Please send your comments to archivesofpathology@cap.org or send a letter to the editor with your observations.

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