Oral Histopathology

David E. Klingman, DMD Diplomate, American Board of Oral and Maxillofacial Pathology Diplomate, American Board of General Dentistry

Instructor Guide

This brief instructor's guide accompanies the Oral Histopathology Series and includes three documents:

- 1. This guide
- 2. List of abbreviations used in the series, and commonly by Oral and Maxillofacial Pathologists
- 3. List of histologic terminology used in this series, and commonly by Oral and Maxillofacial Pathologists

Purpose/Educational Goals:

- 1. Familiarize participants with histologic terminology and interpretation
- 2. Familiarize participants with common oral and maxillofacial pathologic entities

Histology and microscopy are challenging disciplines for those interested in the field; these disciplines are even more challenging for health care providers whose primary focus is clinical medicine and dentistry. The challenge and 'disconnect' that often occurs between laboratoryoriented and clinically-oriented providers is mutual understanding of terminology, language and diagnosis; this manifests frequently during conversations between clinicians and laboratory/pathology personnel over diagnoses and terminology utilized in pathologic reports (socalled "sign outs"), particularly those where simple diagnoses are unobtainable through difficulties in tissue orientation and processing, lack of specific features associated with a 'one line' diagnosis or the requirement for complex comments in the biopsy report.

The organization of this series is designed around histologic case sets. Each case may include low power (20-40x) and high power (100-400x) digital images made from glass slides presented during morning microscope sessions with residents in dentistry, medicine and pathology; individual cases may also be accompanied by images of special stains, immunohistochemistry, polarized images and other specialized microscopic techniques to highlight specific features. Each set is designed to be accompanied by a supplemental document containing diagnoses and brief descriptions of the histologic features in each case. The series consists of separate presentations which carry the participant on a course from normal histology and introduce common abnormal findings, an introduction to special stains and histologic 'slide' cases prepared from weekly morning case reviews of common oral lesions. The case consist of soft tissue neoplasms, salivary pathology, odontogenic cysts and tumors and non-odontogenic cysts and tumors, some skin pathology and head and neck cases. Cases are repeated; the participant should recognize familiar histologic patterns. The series documents are numbered 00 - 45:

- The series begins with this Instructor Guide, goals/objectives, and a list of abbreviations
- The first five series consist of normal histology, abnormal findings, bone histology, foreign body materials and special stains commonly used
- The remainder of the series are the 'unknown' cases and a number of special series which include dermatologic cases (alopecia, temporal artery, cytologic triage, intraoperative consulation and dermatopathologuc cases; diagnoses follow each case in the 'slides' and supplemental materials
- The final series set identifies histologic patterns and may serve as both a summary series or as exam/board preparation for those interested in basic histologic pattern recognition

The purpose of this series is to serve as an introduction for those interested in microscopic evaluation. It is not, however, designed to supersede or replace a formal training program or board certification in the specialty of Oral and Maxillofacial Pathology.

It is recommended that the participant review one case set each week in order to digest the specific histologic findings and generate questions and/or review material from sources suggested (these sources follow at the end of this guide).

For the instructor:

If used as an electronic series for distribution, the instructor should distribute, at the beginning of the series:

- 1. The list of abbreviations
- 2. The list of histologic terminology
- 3. The first slide set and supplement, numbered "01"

Each week, the instructor should then distribute the next numbered slide set and supplement ("02," "03," etc.) until the final set has been distributed.

The final series set may be released as a stand-alone teaching module.

If used in a classroom/group setting, the instructor should distribute the lists of abbreviations and histologic terminology and then use each sequentially numbered set ("01," "02," etc.) until the series is complete; the supplemental files that accompany each numbered set may be used as either instructor notes, be distributed to the participants, or both.

For the participant/student:

The course is designed to be either a stand-alone course or as a series of self-paced modules; case sets and supplemental material are reviewed weekly. Repetitive exposure is designed to facilitate recognition of histopathologic findings associated with each diagnosis. The supplemental material includes both histologic and clinical clues to aid the participant in making clinical connections, thus facilitating better understanding of pathology diagnoses, case reports and comments made in case reports.

Grading:

This course is not designed with a specific grading scheme in mind. This case-based format is rather designed to generate question and discussion and development of clinical and microscopic differential diagnoses

References (for the instructor):

- Barnes L, Eveson J, Reichart P, Sidransky D. World Health Organization Classification of Tumors: Pathology and Genetics Head and Neck Tumors. IARC Press, 2005.
- Ellis G, Auclair P. AFIP Atlas of Tumor Pathology: Tumors of the Salivary Glands, Fourth Series Fascicle 9. ARP Press, 2008.
- Fletcher C, Unni K, Mertens F. World Health Organization Classification of Tumors: Pathology and Genetics Tumors of Soft Tissue and Bone. IARC Press, 2002.
- Mills S. *Histology for Pathologists, 3ed.* Lippincott Williams & Wilkins, 2007.
- Neville B, Damm D, Allen C, Bouquot J. Oral and Maxillofacial Pathology, 3ed. Saunders/Elsevier, 2009.
- Newland J, Meiller T, Wynn R, Crossley H. Oral Soft Tissue Diseases, 5ed. Lexi-Comp, 2011.
- Regezi J, Sciubba J, Jordan R. Oral Pathology: Clinical Pathologic Correlations, 6ed. Saunders/Elsevier, 2012.
- Robinson R, Vincent S. AFIP Atlas of Tumor Pathology: Tumors and Cysts of the Jaw, Fourth Series Fascicle 16. ARP Press, 2012.
- Sciubba J, Fantasia J, Kahn L. AFIP Atlas of Tumor Pathology: Tumors and Cysts of the Jaw, Third Series Fascicle 29. AFIP Press, 2001.
- Unni K, Inwards C, Bridge J, Kindblom LG, Wold L. AFIP Atlas of Tumor Pathology: Tumors of the Bones and Joints, Fourth Series Fascicle 2. ARP Press, 2005.
- Young B, Lowe J, Stevens A, Heath J. Wheater's Functional Histology: A Text and Colour Atlas, 5ed. Churchill Livingstone/Elsevier, 2006.

References (for the participant/student):

- Neville B, Damm D, Allen C, Bouquot J. Oral and Maxillofacial Pathology, 3ed. Saunders/Elsevier, 2009.
- Newland J, Meiller T, Wynn R, Crossley H. Oral Soft Tissue Diseases, 5ed. Lexi-Comp, 2011.
- Regezi J, Sciubba J, Jordan R. Oral Pathology: Clinical Pathologic Correlations, 6ed. Saunders/Elsevier, 2012.
- Young B, Lowe J, Stevens A, Heath J. Wheater's Functional Histology: A Text and Colour Atlas, 5ed. Churchill Livingstone/Elsevier, 2006.