The Daily Dose: Study Tips for Exam and Board Preparation

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

The Daily Dose: Clinical Oral Pathology and Oral Medicine

I was trying to decide what might be a topic for both exam study and for general interest and found myself a bit stumped since I didn't want to repeat either of the topics from the previous posts (i.e. burning mouth 'syndrome' and oral ulcerative disease). I scanned through my files and my attention was drawn to the folders I have on rheumatologic disease, sarcoidosis and temporal arteritis and to some draft presentations that I had put together on temporal arteritis. Once again, let me emphasize that I am neither a physician nor an Oral Medicine practitioner, so I mean in no way to distract from the seasoned professionals we have on this bulletin board; I'm simply thinking like a resident who may be looking for some basic information to be successful in program completion and board or exam preparation.

The topic I'd like to introduce is the broad category of rheumatologic diseases and their 'relatives' and recommend for those preparing to study for examinations to consider the following questions:

Q: What may the affects be on the oral cavity or head and neck considered in the patient with rheumatologic diseases?

A: Consider oral ulcerative disorders, lichenoid disorders and lichen-planus, and salivary dysfunction (yes, I know those seem like unrelated issues, but stay with me and you'll hopefully see where I'm going)

Q: What diseases might be worth considering?

A: Consider systemic lupus erythematosis (with a focus on lichen planus and lichenoid mucositis), sarcoidosis (with a focus on both granulomatous disorders and potential for oral granulomatous ulcers, with a recommendation to also look up Lofgren's Syndrome and Heerfordt's Syndrome), temporal arteritis/giant cell arteritis (with a focus on 'vascular induced necrosis' and ulcerative disorders), and primary and secondary Sjogren Syndrome (with a focus on both salivary dysfunction and the overlap or comorbidity with rheumatologic disorders)

Q: Are there any interesting connections with other systemic disorders?

A: In doing some research, I found connections between temporal (giant cell) arteritis and polymyalgia rheumatica, Sjogren Syndrome and sarcoidosis, and of course the well known of obvious connections between systemic lupus and other rheumatologic diseases

A few articles that I have in my library that I'd suggest:

- Rahmnan A, Eisenberg D. Systemic Lupus Erythematosus. New Engl J Med. 2008; 358:929-939
- Tsokos G. Systemic Lupus Erythematosus. New Engl J Med. 2011; 365:2110-2121
- Treister N, Glick M. Rheumatoid arthritis: A review and suggested dental care considerations. JADA. 199; 130:689-698
- Badhey A et.al. Sarcoidosis of the Head and Neck. Head and Neck Parhol. 2015;9:260-268
- Mansour MJ, Hashimi I, Wright JM. Coexistence of Sjogren's Syndrome and sarcoidosis: a report of five cases. J Oral Pathol Med. 2007;36:337-341

- Zachariades N et.al. Temporal arteritis: report of a case. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2006;102:192-7
- Weyand CM, Goronzy J. Glant cell arteritis and polymyalgia rheumatica. New Engl J Med. 2014; 371: 50-57
- Donaldson M, Epstein J, Villines D. Managing the care of patients with Sjögren syndrome and dry mouth: Comorbidities, medication use and dental care considerations. JADA. 145(12):1240-1247
- Shiboski SC et.al. American College of Rheumatology Classification Criteria for Sjogren's Syndrome: A Data-Driven, Expert Consensus Approach in the Sjogren's International Collaborative Clinical Alliance Cohort. Arthritis Care & Research. 2012; 64(4):475–487

The Daily Dose: Histopathology

It seems sensible, since the topics mentioned in the clinical discussion include the topic of granulomatous inflammation to make the focus point here the same.

In an effort to narrow things to a digestible level for this brief discussion, I would offer the following broad topics for consideration when thinking about granulomatous inflammation and focus on the 'tight' non-necrotizing granulomas identified more often in disorders such as sarcoidosis versus the necrotizing granulomatous inflammation identified in infectious diseases versus the granulomas that may be associated with an eosinophilic inflammatory component in disorders such as pyostomatitis vegetans:

sarcoidosis gastrointestinal disease (Crohn's Disease and its oral manifestations, i.e. pyostomatitis vegetans) foreign body reactions infectious diseases

The article I mentioned above (Badhey at.al.) discusses the histologic features of sarcoidosis. Additional suggestion:

• Batal H et.al. Sarcoidosis: medical and dental implications. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 1999;88:386-90

I'd like to indulge a bit here and mention a case I reviewed a few years ago: the patient suffered from alopecia and I received a scalp biopsy to identify the cause of the hair loss and reported the case as "non- nectrotizing granulomatous inflammation" and subsequently received feedback from the clincian that the patient had been diagnosed with multiple organ manifestations of sarcoidosis; I think this serves as a lesson for how local tissue and systemic tissue disorders can be related

For histology on giant cell arteritis, I'd suggest Zachariades' article previously mentioned.

Finally, since I mentioned foreign body reactions in the context of granulomatous inflammation, I'd suggest that any students of this topic make use of the AAOMP Atlas at http://www.aaomp.org/atlas/ and take advantage of the work put in by Dr. Harvey Kessler and others (including some of us who were able to contribute images either in our residency programs or as members of our academic institutions).

Note: I didn't recommend any texts in this discussion since in my experience these seem to be topics more commonly laid out in either current literature or medical texts; however, our core texts in Oral and Maxillofacial Pathology should provide a useful overview.