The Daily Dose: Study Tips for Exam and Board Preparation

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The Daily Dose: Clinical Oral Pathology and Oral Medicine

Consider the spectrum of oral aphthous-like ulcers and granulomatous ulcers. I've developed a preference when speaking to my learners to discuss all oral ulcerative diseases (omitting oral dermatologic, vesiculobullous and ulcerative diseases such as lichen planus, pemphigus and pemphigoid for the time being) as part of a spectrum, asking the following questions:

Are the ulcers more or less single or in 'single clusters' (more suggestive of a more traditional aphthous stomatitis) or are there multiple ulcers more suggestive of a systemic disease?

If you suspect a systemic disease, what categories might you consider?

I tend to focus (at least with the audiences I've had the last few years, composed predominantly of AEGD-1, OMFS and Family Health interns and residents) on just a few broad categories under this broad topic/heading: aphthous stomatitis, perhaps erythema migrans and 'psoriasiform' mucositis (if you're not overly concerned about the potential controversies related to whether these are truly related or not), infectious diseases (fungal vs bacterial vs viral), gastrointestinal disease, autoimmune and autoinflammatory disease, immune suppression (HIV/AIDs, organ or marrow transplant, hematologic malignancy second order effects, perhaps even second order effects from poorly controlled endocrine disorders such as diabetes etc.) and 'granulomatous' diseases (which include the aforementioned pathologies as well as foreign body, autoimmune rheumatologic diseases, etc.)

I would propose (and comments are welcome) that oral dermatologic diseases are best served being taught as a separate category, and would include:

lichenoid mucositis (including lichen planus, lichenoid reaction to both topical and systemic agents, dietary agents, tobacco products, graft versus host, and autoimmune rheumatologic disorders such as systemic lupus)

pemphigus and its variants, and the 'intraepithelial' and 'acantholytic' disorders

pemohigoid and its variants, and the 'subepithelial' disorders

erythema multiforme (I have an easier time putting this into my lectures as a separate item)

I would further propose (and comments are welcome) that when speaking about infectious diseases (and any topic for that matter) that we might take a statistician's approach and teach the common infectious diseases first and "leave the weeding to the gardeners" [I'm not suggesting that those preparing for examinations or boards should discount these, but remember that 'common things occur commonly'].

In my mind we should be aware of the most common fungal diseases that may be found in the upper aerodigestive tract (candida, Histoplasma, Coccidioidomycosis) versus those perhaps endemic to equatorial regions (ex. Paracoccidioidomycosis) versus those more often associated with the severely immune suppressed (Mucor and related species, Cryptococcus, etc.)

In my mind, we should consider at a minimum the following viral diseases (both ulcerative and otherwise): herpesviruses (all 8 variants), enteroviruses [as part of the oral ulcer discussion], human papillomaviruses [both low risk associated with papillomas and high risk associated with oral, oropharyngeal and nasopharyngeal malignancies], the role viruses may play in other carcinogenesis, and for completeness some knowledge about hepatitis virus(es) and HIV

Bacterial infections are (I think) more complex, since this can lead into discussions not only of oral ulcerative diseases, but also caries and periodontal disease; traditionally, our texts and routine discussions circle around syphilis as the prototypical oral ulcerative or granulomatous bacterial disease (and perhaps Actinomyces infections), at least in any of the discussions I've had. This may be a topic for more discussion.

Summary:
The goal here was to spark some discussion and suggest an algorithm to help clarify oral ulcerative diseases; I chose this methodology and discussed what's here based on what's in my literature library, but I will be forthcoming and say that there are far more experienced people, many focused on Oral Medicine, so I would encourage any exam or board candidates to stay engaged with your program directors and/or Oral Medicine practitioners in your institutions.

The Daily Dose: Histopathology

I just want to bring one topic into the discussion: soft tissue tumors (I know... this is a tremendous topic to cover in just a few sentences, so don't chase down the messenger...)

I was scanning my LinkedIn feed and came across someone who had posted an article updating the area of immunohistochemistry for soft tissue tumors:

Wei S, Henderson-Jackson E, Qian X, Bui MM. Soft tissue tumor immunohistochemistry update: illustrative examples of diagnostic pearls to avoid pitfalls. Arch Pathol Lab Med 2017; 141(8):1072-1091

I bring this up only to say that as far as I can tell, both immunohistochemistry and molecular pathology are becoming (if not already) necessities for diagnosis of soft tissue tumors and from both personal experience with a few challenging cases, attendance at one of the USCAP Interactive Microscopy sessions in Palm Springs (led by Jason Hornick; I highly recommend it, there's a session coming this December) and accumulating some thorough summary articles like the one I mentioned, I can say I've benefitted when I have encountered what are for me relatively uncommon challenging soft tissue lesions and been more elegant both in diagnosis and in referral patterns to the subject matter experts.

In an effort to mitigate the bandwidth I've already used, I'll end by saying that I have accumulated more than a dozen articles summarizing the immunohistochemistry and molecular pathology in this area; you're welcome to contact me if you'd like more information. Certainly, the Enziger and Weiss soft tissue text and the AFIP Fascicle Tumors of the Soft Tissue (Fascicle 20) are excellent starting points as well.