

“Considering That This Is Such A Rare Condition, Should We Really Be Expected To Recognize It?”

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Editorial

After serving as section editor of the Clinical Pathologic Conference section of this journal for the last five years, I was honored when asked if I would be willing to assume the role of Oral and Maxillofacial Pathology Editor when the previous section editor, Dr. Mark Lingen, became Editor-In-Chief. At the same time, I must admit to some trepidation at the prospect of upholding the high standards that have come to exemplify this journal. The continued esteem with which this journal is regarded is due to the hard work and dedication of many, including prior section editors, past and present members of the Editorial Board, the many colleagues who consistently agree to serve as peer reviewers, and the support of the AAOMP and its members. One of my first duties, as new section editor, was to write an editorial on a subject of my choosing. Different potential topics immediately came to mind. Should I write about the recent move towards renaming several odontogenic cysts as “benign cystic tumors”? Discuss the potential risks and benefits of combining training in oral and maxillofacial pathology, oral medicine and oral and maxillofacial radiology into 1 mega-specialty with multiple tracks? Review recent attempts by the College of American Pathologists to restrict “interstate commerce” and the potential impact of this on oral pathology/oral radiology practice, etc...?

Fortunately, a recent question posed by a dental student helped bring my thoughts into focus. But first let me digress for a couple of paragraphs. I have the great fortune of working with a large group of extremely bright and talented students on a daily basis, both in clinical and classroom settings. Even so, when it comes to knowledge acquisition and integration in the general area of oral pathology/oral medicine/oral radiology, the amount of material that needs to be covered at the undergraduate level can appear overwhelming, not only from the dental student’s perspective but also from the faculty who are actively involved in teaching these subjects. This is particularly true in the current dental school curriculum, in which there are competing demands from different disciplines to cover a continuously expanding body of material while also trying to integrate this knowledge into a coherent, clinically relevant package. This has, in my opinion, been made more problematic by the ubiquitous use of PowerPoint presentations, by which large quantities of information can be delivered in point form lists during a single 50-minute lecture. Does the following scenario sound at all familiar? As a faculty member, you consider yourself lucky to have 2 lectures to cover

odontogenic cysts and tumors, including radiographic presentation, clinical features, management and ideally, some basic histopathology. In order to accomplish this, you highlight the pertinent “take home messages” in class and provide your students with a copy of your 90-plus slide presentation and the corresponding textbook reading assignment. I, for one, admit to being culpable of this on more than one occasion. This “just the facts ma’am”-based approach was considerably less common when I went to dental school, in part because the professor’s ability to cover material was in large part limited by the speed at which my fellow classmates and I could transcribe what we were being lectured on. In many classes, the only way to overcome this limitation was to supplement lectures with the assigned textbook readings. These readings were, and still are, essential to setting the background and explaining the underlying concepts in greater detail. Unfortunately, because of countless competing demands (multiple daily tests, assignments, projects, competencies, etc...), today’s students often do not have adequate time to review the background material at their own pace, and instead are forced, or choose, to rely on memorizing these bulleted lists. Not only does this potentially result in less appreciation for the underlying mechanisms involved, but it also cultivates a feeling, on the part of many students, that they are being overwhelmed by information, some ‘important’, much of it “esoteric”.

Which brings me back to this particular student’s question. Let me set the scenario. As part of the recent revisions to the curriculum at the dental school I teach at, all first and second year dental students attend a biweekly series of seminars focused on a particular topic area. Students initially work in small groups under the guidance of a faculty mentor, where they are provided with a list of “key questions” to investigate prior to the first class session. One of the goals of this series of seminars, or “Grand Rounds” as they are termed at our institution, is to foster in-depth discussion on the significance of a particular topic or condition, to discuss any controversies and, where applicable, to integrate the basic science mechanisms with the clinical aspect. Students then attend a seminar at which two or three speakers, “experts in the field”, present an overview of the topic. The goal is to generate student discussion, without providing a “definitive answer”. This is followed by further small group discussions at which students assess the information that was presented and then consider questions such as: is there enough evidence available to make an informed decision? What additional information may be required? What effect does this information have, if any, on current treatment practices? These questions are explored further at a subsequent combined seminar session, under the guidance of the original two or three faculty presenters.

The focus of one of these recent seminar series was “pemphigus vulgaris”, at which I served as one of the faculty presenters along with a colleague in oral medicine and a basic science colleague whose research focus is on the biology of the oral mucosa. After presentations on the biochemistry behind epithelial-connective tissue adhesion and a review of the clinical presentation and demographics of mucocutaneous vesiculo-erosive conditions, a patient who had recently been diagnosed with pemphigus vulgaris was kind enough to spend 45 minutes detailing to all in attendance her year long journey through the health care system before ultimately receiving a definitive diagnosis. She described how she had initially developed erosions involving her oral cavity that had been

interpreted by her primary care provider as “a possible allergy to toothpaste”. Multiple visits to her dentist, primary care physician, allergist, otolaryngologist, and, when she ultimately developed rectal lesions, a rectal surgeon, where followed by multiple empirical therapies that were offered despite the absence of an actual diagnosis. She explained how she did not ultimately obtain a definitive diagnosis, and hence proper therapy, until she presented to a hospital dentistry clinic, where she insisted on having a biopsy performed.

Among the many topics of discussion and questions that came up during this session was a comment posed by a dental student, who to paraphrase, wondered whether, “considering the fact that pemphigus vulgaris is such a rare condition, literally one or two cases per million patients, as future dentists should we really be expected to recognize this condition”? While the comment was met with disapproval from some in attendance, I am confident that this student’s statement was both a laudable attempt to justify the delay described in identifying this patient’s condition, as well as a reflection of frustration at the volume of material that is covered in the dental curriculum.

But if dentists can’t universally recognize and assess these non tooth-related conditions, develop a suitable differential diagnosis and proceed appropriately based on this information, then who is going to do this for our patients? Certainly there are many physicians and physician assistants in the community who have an interest in the orofacial complex. However, in many medical schools, the amount of time devoted to oral conditions is limited. In a recent survey¹ of deans at U.S. medical schools, close to 70% reported less than 5 hours of oral health-related curricular activity and 10% reported offering no coverage at all. Notwithstanding this often limited exposure to conditions of the oral cavity, I am by no means implying that our medical colleagues are uninterested in this area (one just has to look at the large number of oral and head and neck lesions that are presented in the “Images in Clinical Medicine” section of the New England Journal of Medicine to gauge the obvious level of interest). Much of this limited coverage of oral conditions can be explained by the fact that most medical school faculty and practicing physicians correctly assume that dental professionals are the “specialists” of the oral cavity.

This means that the general dental provider, just like his or her medical counterpart, must function as the primary oral health care provider in their community. As has been stated numerous times in the past, dentists, by the nature of our training, are the health care providers best suited to fulfill this role. Again, similar to our medical colleagues, this does not imply that the general dentist or dental specialist in the community should be expected to recognize, diagnose and treat every imaginable condition that may present in the oral cavity. However, as the “gatekeeper” for general oral health, dentists must be proficient at thoroughly assessing these patients, performing or ordering any additional studies that are needed to arrive at a definitive diagnosis and providing initial treatment to the patient presenting with uncomplicated oral lesions and/or oral manifestations of underlying systemic conditions that they are reasonably likely to encounter at some point in their clinical practice. There are many dentists who routinely do treat these patients. In fact, it is my personal observation that the vast majority of these dental care providers do an exemplary job; referring for outside consultation those patients who present with atypical manifestations

warranting more advanced workup or those who are recalcitrant to conventional therapy. On the other side of the coin though, there are equally as many dentists who routinely refer these patients to another health care provider with minimal pre-referral assessment.

As a practicing oral and maxillofacial pathologist, I only see patients who are referred to me by other health care providers, typically general dentists, other dental specialists and physicians. The vast majority of these patients present with well-written and thorough letters of introduction, including in many cases a thoughtful clinical differential diagnosis. Not infrequently, however, many are initially referred by their dental provider directly to a primary care physician, from where they are subsequently sent to successive medical specialists. Many patients have undergone several therapeutic interventions, commonly including multiple courses of antifungal therapy, frequently without having undertaken any prior diagnostic testing. This begs the question: why do some oral health care providers refer patients with lesions restricted to the oral cavity directly to the patient's primary care physician instead of starting the diagnostic workup themselves? Ultimately, if we don't fully accept our role as primary care oral health care provider, other health care providers will step in to fill the void². Also of note is the observation that a substantial percentage of patients that I see on referral present with a chief complaint of generalized painful oral erosions, in which the harvesting of representative tissue for histopathological examination is a prerequisite to a definitive diagnosis. As Craig Miller wrote in a recent editorial³, "diagnosis dictates treatment". So why are some health care providers not taking this next step, namely that of obtaining or ordering a biopsy, before deciding that a trial course of therapy or a referral is necessary? In many cases, the referring provider may be of the opinion that by sending their patient directly to a health care provider with more specialized experience, they are providing their patient with the best care possible. In other situations, a lack of comfort with managing these conditions may be a factor. While these are both very reasonable rationales for taking this approach, I believe that community-based dentists, with appropriate training, are fully capable of both diagnosing and managing the bulk of their patients presenting with uncomplicated oral mucosal conditions such as erosive lichen planus and cases of mucous membrane pemphigoid, especially when restricted to the gingiva. While definitive treatment of the patient with pemphigus vulgaris is probably, in most cases, best left to an interdisciplinary team with extensive experience in this area, the initial workup and preliminary diagnosis can and probably should be managed by the primary care dentist, with the assistance of the dental surgical specialist were warranted. In reality though, a clinician's comfort level at assessing and, where suitable, treating these patients will, in many cases, have a direct correlation with the extent of their dental school and/or post-graduation exposure to these conditions.

So what are the practical implications of this position from the perspective of dental education? For one, this means that at a minimum, the graduating dentist must be well versed in and fully capable of performing routine soft tissue diagnostic biopsies from lower risk sites such as the gingiva, alveolar mucosa and buccal mucosa. This should be a mandatory component of every dental student's clinical training, no different than being able to demonstrate competency in preparing and placing composite restorations or performing endodontic therapy on multi-rooted teeth. While not all dental surgeons may

elect to employ these skills in private practice, the knowledge that they gain from being comfortable with these techniques will be invaluable. Secondly, an emphasis needs to be placed on the recognition, differential diagnosis and, equally importantly, the definitive management of patients with erosive and systemic conditions of the oral cavity. This cannot be accomplished in the classroom setting alone. This requires one-on-one clinical or simulated clinical exposure, ideally in a specialized clinic setting. Students should also be able to demonstrate clinical competency in the management of these conditions prior to graduation. And finally, the dental provider treating patients with these conditions must be well aware of the less common, and even those rare conditions that may present in a similar manner. The diagnostic process starts, by necessity, with having a sufficiently high index of suspicion for both common and rare conditions, on which to make an informed decision on how to proceed. Although, the dental curriculum has made some progress in these directions over the past 2 decades, there is still considerable room for improvement.

So to paraphrase my response to the young dental student and soon to be dental surgeon who posed this question, "If not the dental professional, then who will recognize it"?

¹ Ferrullo A, Silk H, Savageau JA. Teaching oral health in U.S. medical schools: results of a national survey. *Acad Med* 2011;86:226---30.

² Hupp JR. Are dentists risking losing their relevance? *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2009;107:599---604.

³ Miller CS. Where are the diagnostic codes in dentistry? *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2011;111:131---2.