FACULTYPERSPECTIVE

VIEWS ON DENTAL TOPICS & TRENDS

Oral Cavity a Window to Overall Health

Oral health and disease are intimately related to general health status. Clinicians understand that the oral cavity does not exist in isolation, but as an integral component of the human body. To think of the oral cavity as only consisting of teeth and supporting structures is to suggest that the intimate, bi-directional relationship of systemic and oral health does not exist. The oral cavity may be a potential source of inflammation or infection, which could have a significant impact on systemic health.

Moreover, the oral cavity often mirrors systemic health and may be the initial site of presentation of an underlying disease process. That disease may simply manifest in the oral cavity (i.e. localized oral lichen planus) or may include the oral cavity in its manifestation (i.e. glossitis related to malabsorption). The oral cavity may even provide a more accessible location for diagnosis of certain systemic conditions (i.e. Sjogren's syndrome).

Lesions affecting the oral cavity usually have a similar clinical appearance and there is often no single characteristic that differentiates oral soft tissue diseases. This diagnostic dilemma often precludes appropriate diagnosis and management of local disease and delays investigation of a possible systemic etiology. A detailed medical evaluation is essential for all complaints related to the oral cavity and peri-oral structures. The medical evaluation should include the history of the present condition, the patient's past medical and surgical history and any symptomatology that the patient may be experiencing. A family history is an important aspect of medical evaluation and may gain additional importance in patient care, as we now know that some oral conditions have a genetic predisposition. In the age of personalized medicine, it is only a matter of time before a genetic basis for oral disease diagnosis, accompanied by guidance for treatment, is routine in clinical practice. In addition, medication usage, documentation of allergies,

and a social history are all critical components of a thorough medical evaluation.

When querying a patient about oral lesions, it is imperative for clinicians to understand if lesions developed recently or are of long-standing duration, the number of lesions present, if this is the first episode or if they recur, and if there are lesions elsewhere on the body. This will help categorize the disease process as being acute or chronic, single or multiple, primary or recurrent, or if the oral condition is a local manifestation of a systemic process, respectively.

In conjunction with developing a detailed history, it is important to perform an accurate and expanded physical examination, which should be viewed in the context of a regional examination. This must include thorough inspection and palpation of the dentition, supporting dental structures, oral mucosa, and tongue, as well as evaluation of the visible posterior tongue and oropharynx. Additional clinical information may be needed to aid in a differential diagnosis and is often obtained from examination of the cranial nerves, the temporomandibular joint system, facial skin (with particular attention to the peri-oral area), regional lymph nodes, thyroid gland, and the salivary glands.

It is from this wealth of information that the clinician will begin to formulate a differential diagnosis, which is, in part, based on prior fundamental knowledge and experience. It can be difficult to reach a final diagnosis without the use of adjunctive diagnostics and it is often necessary to order appropriate laboratory tests for comprehensive evaluation. These tests might include hematologic assays and/or obtaining samples of tissue or other specimens, for laboratory analysis, such as cultures/smears.

A "final" diagnosis may need to be modified by the clinician as the patient is being managed for the presumed disorder. For example, a patient may be placed on a medication known to modify a specific disease. If the patient has been on a treatment regimen and is unresponsive to therapy,



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a review of the differential diagnosis and final diagnosis is required. Sometimes it is during this clinical scenario that an underlying systemic condition is identified as the etiology of the disease manifesting locally in the oral cavity.

Understanding appropriate patient evaluation, formulating a differential diagnosis, obtaining adjunctive diagnostic testing, and rendering a final diagnosis are all expected of today's modern dentist. It is of paramount importance to diagnose an oral condition which may save a patient's life or may significantly decrease any disease-related morbidity. Following the diagnostic approach as outlined gives the clinician the greatest chance of accurately diagnosing oral disease. It is our hope that the oral cavity is considered a functional unit of the whole and as a window to overall health.