



The integral connection between dentistry and ear, nose, and throat (ENT) health

The connection between oral health and overall health is a fundamental component of comprehensive health care. Oral diseases have been associated with various systemic conditions, including cardiovascular and respiratory conditions, diabetes, conditions of impaired immunity, and more. Moreover, systemic conditions can change the course of oral diseases, such as the effect of diabetes on periodontal diseases, emphasizing a bidirectional relationship. As discussed in previous editorials,^{1,2} the life expectancy of patients dealing with chronic illnesses, of cancer survivors, and of those with special needs is on the rise, leading to a shift in the demography of patients seeking dental care. Across North America and globally, we are witnessing the emergence of more specialized clinics catering to patients with complex medical conditions and special needs. In the upcoming year, we aim to delve deeper into the intersection between dentistry and other health care specialties.

This editorial discusses the profound connection between dentistry and otolaryngology (ENT), highlighting how issues in one can significantly impact the other. The interplay between these two fields is not only crucial for understanding specific medical conditions but also for fostering a more holistic approach to health care.

Overall, the mouth serves as a critical gateway to the larynx and pharynx (the “ENT region”). Oral health issues, such as periodontal disease and dental infections, can have far-reaching effects on the ear, nose, and throat. For instance, a tooth abscess can lead to maxillary sinusitis, or other paranasal space infections.

Earaches, which are perceived by many as unrelated to oral health, can sometimes be traced back to temporomandibular joint (TMJ), impacted third molars, or even oro-otic fistulas.^{3,4} These dental issues can cause referred ear pain, and even ear discharge, leading to misdiagnosis if the dental origin is overlooked. Moreover, the proximity of oral infections to the throat can lead to pharyngitis or tonsillitis, illustrating the close physical and functional relationship between the mouth and throat.

The oral microbiome, consisting of bacteria, fungi, and viruses, plays a crucial role in overall health. More research is required; however, it can be assumed that an imbalance in the oral microbiome may lead to oral conditions that may exacerbate

or trigger ENT disorders. Understanding the oral microbiome’s impact on ENT and oral health is essential for developing targeted treatments and preventive measures.

Saliva is a vital component for both oral and ENT health. It aids in digestion, protects teeth from decay, and helps to maintain balance in both oral and laryngopharyngeal microbiomes. Saliva is of utmost importance in the immunity of the oral, pharyngeal, and laryngeal cavities. Salivary gland disorders can lead to dry mouth, which increases the risk of dental caries, periodontal diseases, tonsillitis, pharyngitis, and subsequently, more severe ENT complications.

Certain dental procedures can inadvertently affect ENT health. An important example is the possible perforation of the maxillary sinus as a complication of root canal treatment to the maxillary teeth, resulting in oroantral fistulation. On the other hand, certain dental procedures can be affected by ENT health; for example, the requirement for healthy maxillary sinuses for performance of a sinus elevation procedure, which is occasionally needed before dental implantation. Such issues demand from each profession an understanding of the other profession’s capabilities and limitations, as well as a coordinated approach to patient care.

Collaboration between dental practitioners and ENT specialists can lead to better diagnostic accuracy, more effective treatment plans, and improved patient outcomes.⁵ This collaborative model also emphasizes to the patient the importance of considering his or her overall health, taking the extra step beyond the traditional solo approach.

In conclusion, the association between dentistry and ENT health is a compelling example of the interconnectedness of the human body. Understanding this connection is crucial for health care professionals to provide holistic care. It underscores the need for a more integrated approach in medical education and practice, where the interdependency of different medical fields is recognized and embraced. As we continue to explore and understand these connections, the potential for improved patient care and outcomes becomes increasingly apparent. This field’s future lies in the continued collaboration and cross-disciplinary research, paving the way for more comprehensive and effective health care solutions.

References

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