

YH Article

The Dental Impact on Sleep Apnea and Ease of Breathing, Swallowing and Speaking

About eighteen years ago, when oral appliance therapy was considered “experimental”, a patient was referred to me after extensive ENT surgery and CPAP were ineffective. My dental colleagues would refer to this type of case as “road kill”. We knew that oral appliance effectiveness was inversely related to the severity of the sleep apnea, yet the treatment had not yet established a track record in the medical literature to become official treatment yet. Appliances were less versatile and effective in treatment at the time, too.

I proceeded to ineffectively treat the patient, so the more advanced ENT procedures were attempted on the back of his tongue and when this failed a tracheostomy was performed so that he could open the surgical entrance to his windpipe below his tongue when he wanted to be able to breathe during sleep. In effect his air intake was positioned below the tongue to bypass it when it would be significantly block his throat during sleep.

While awake, his adrenaline levels were able manage the muscle tone enough to allow him to get air through his mouth and nose past his tongue and keep the surgical opening closed. In prior articles I have shared with you my concerns about the increased adrenaline type hormone levels required to manage our “airways” and the cumulative impact of this on our health and well being. I won’t delve further into this now. You can find these articles in your health magazine archives. I only share this to illustrate the difficulties associated with severe apnea and anatomical impairment of airflow through the throat.

This patient developed the sleep apnea symptoms after undergoing a dental surgery procedure to shorten his lower jaw that was protruding in front of his upper jaw. It was a “cosmetic” motivated procedure that may have been justified in that he did not have, what is referred to as a “normal” appearing bite. Because the lower jaw houses the tongue and the base of the tongue is directly and indirectly attached to the inside of it. This surgical procedure moved the whole tongue backwards into the throat.

Even from dental school, I was aware of this jaw shortening procedure; however, I was not aware of the negative impact of it on health and even survival. It was one might consider common sense to predict the cause and effect here, but it apparently was not commonly noticed and studied so it could be published and become part of medical and dental literature so it can be integrated into the standard of care. In a future article I can discuss the politics of the standard of care. For now I want to leave you with a glimpse of the gap that exists in medical and dental research in the critical areas where the two professions meet, the throat. As you have also seen in my prior articles, I explain how the domain of dentistry controls the home & environment of the tongue and its primary functions involving speaking, swallowing and breathing. Farrand Robeson, DDS refers to this interrelation of this relationship as Oral Systemic Balance.