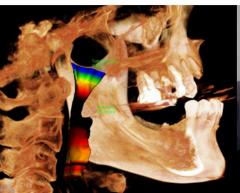
December 2020

Edentulism Is Associated With More Severe OSA

"Creating Smiles,
Changing Faces
& Saving Lives"



66 y/o Maxillary Full Denture Mandibular 4 Implants with Posterior Partial Denture



48 Year-old with Severe Obstructive Apnea
Missing Posterior Teeth



104 years-old

Currently, there are 36 million edentulous (without teeth) people in the United States with a continuous escalation over the next twenty years. As our patient population continues to age, there is an increase in tooth loss due to caries and periodontal disease. Presently, there are over 27 million people with Obstructive Sleep Apnea which increases the risk of high blood pressure, atrial fibrillation, heart disease, type 2 diabetes, stroke and depression. This is a contributing factor in many traffic accidents, owing to the persistent drowsiness suffered by many OSA patients before the disease is recognized and treated. The current estimate is 26% of adults between the ages of 30-70 years have sleep apnea and there are over 8 million CPAP users in the United States.

A very detailed study compared dentate subjects (defined as greater than 10 occluding teeth) to edentulous subjects. This study included age, gender, body mass index (BMI), Epworth sleepiness scale (ESS) score, nadir oxygen saturation (nO2), and in-laboratory overnight polysomnogram-confirmed OSAS sleep studies (apnea hypopnea index {AHI} > 5) without dentures. All of the polysomnograms were read by a board-certified sleep physician.

The results were very significant in that people who slept on their back and did not have more than ten teeth to hold the lower jaw and tongue forward had demonstrated moderate to severe sleep apnea. Add on obesity, palatal tori, mandibular tori or worn dentition and their condition worsened.

Fortunately, we have several prosthetic appliances whether it be overdentures with implants, bars, locator attachments, All-on-Four or Zygomatic implant supported prostheses to consider for the elderly or physically compromised patients. The clinician may want to consider other options for long-term applications as mental (Alzheimer's), physical (Parkinson's) and financial challenges become more apparent in the US population.





