JOMS Study: Surgery to Move Jaws Improves Outcomes in Obstructive Sleep Apnea Patients

Surgery that moves both jaws forward – known as maxillomandibular advancement – is a significantly effective and safe treatment for obstructive sleep apnea, resulting in benefits that include improved breathing, daytime wakefulness and quality of life, as well as a lower cardiovascular risk, according to a new study.

ROSEMONT, Ill. (PRWEB) February 13, 2019 -- Surgery that moves both jaws forward – known as maxillomandibular advancement (MMA) – is a significantly effective and safe treatment for obstructive sleep apnea (OSA), resulting in benefits that include improved breathing, daytime wakefulness and quality of life, as well as a lower cardiovascular risk, according to a new study.

MMA should be regarded as the preferred treatment for patients with moderate to severe OSA who cannot stick with the treatment of continuous positive airway pressure (CPAP) or declined CPAP as a long-term treatment, researchers concluded in the study published in the February issue of the Journal of Oral and Maxillofacial Surgery – the official journal of the American Association of Oral and Maxillofacial Surgeons (AAOMS).

During OSA, airway muscles, large tonsils, the tongue or excess tissue obstruct the airway, resulting in breathing dangerously stopping and starting during sleep. The condition can result in excessive daytime sleepiness, lower quality of life and impaired cognitive function that impacts daily activities. The sleep disorder is associated with high blood pressure, diabetes and cardiovascular disease. CPAP, the standard accepted therapy for OSA, blows air to keep the airways open.

The multicenter study included 30 adult patients with severe OSA, most of them overweight and male, who underwent MMA because they were unable to continue CPAP therapy or they declined to use CPAP long term. Data were recorded before and after surgery.

After patients underwent MMA, researchers found the patients experienced significant improvements in sleep-disordered breathing, sleepiness, sleep-specific quality of life, general quality of life and performance related to mental processes (neurocognitive performance) as well as lower blood pressure. Nearly 94 percent of patients met normal levels of sleepiness after surgery, according to the study. In addition, few adverse events related to treatment were found. The study results were similar to those of other studies that have concluded MMA is associated with few major complications and few treatment-related adverse events.

“This is the only multicenter prospective study comprehensively assessing the effectiveness and safety of MMA by measuring both subjective treatment-related symptoms and objective physical findings after surgery reported to date,” researchers wrote. “The results of this study show that patients have few adverse treatment-related symptoms and abnormal physical findings after MMA, which minimally impact their (quality of life) and masticatory function.”

The authors of “Maxillomandibular Advancement Improves Multiple Health-Related and Functional Outcomes in Patients With Obstructive Sleep Apnea: A Multicenter Study” are Scott B. Boyd, DDS, PhD, Vanderbilt University Medical Center; Radhika Chigurupati, DMD, MS, Henry M. Goldman School of Dental Medicine, Boston University; Joseph E. Cillo Jr., DMD, MPH, PhD, Division of Oral and Maxillofacial Surgery, Allegheny General Hospital, Pittsburgh, Pa.; Gail Eskes, PhD, R Psych, Department of Psychiatry and
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The full article can be accessed at [http://www.JOMS.org/article/S0278-2391(18)30758-4/fulltext](http://www.JOMS.org/article/S0278-2391(18)30758-4/fulltext)

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