Can Obstructive Sleep Apnea Be Prevented? An Integrative Orthodontist Says, In Some Cases, Yes

By Tariq Kamal February 5, 2017

At the Raphael Center for Integrative Orthodontics in Clifton, NJ, founder Barry Raphael, DMD, believes treatment for obstructive sleep apnea (OSA) needs to begin early in life and that, when applied appropriately, preventative measures can greatly reduce the severity of sleep disturbance symptomology or avoid its appearance altogether.

As an orthodontist, he believes the ideal outcome includes straight teeth *and* good breathing habits. The appearance of crooked teeth, he says, "is not genetic but instead a reaction to foods and environment of the modern world. Small jaws mean less room for the teeth and so they come in crowded. What's worse is that the space behind the jaws—where air passes from the nose to the lungs—is also getting smaller," Raphael says. "This is a modern epidemic, and it parallels many of the other chronic diseases of the Western lifestyle, like diabetes, heart disease, and many more."

Antecedent factors underlying the development of disordered breathing include the size and collapsibility of the airway and the velocity and turbulence of the airflow. Although the role of genetic influences on the presentation of these factors cannot be ruled out, Raphael notes, anthropological evidence points to rapid changes in dietary, early-life weaning and feeding, postural, and sleeping behaviors associated with modern styles as being significant progenitors to these determinant factors.

"OSA is the end stage of a long process that begins before birth. By helping

children grow with full-sized jaws, they will also have the biggest, healthiest airway. In this way, there will be less snoring, less limitation to air flow through the airway, and, hence, less obstruction as well."

Raphael says intervention requires practitioners and patients to first reverse bad habits, such as breathing too fast and breathing through the mouth, then undo



Barry Raphael, DMD

the damage those habits have caused. Treatment that improves jaw and airway growth in addition to the development of better breathing and postural habits is essential, he says, and should be put into practice as soon as habits which lead to poor facial growth are discovered in younger patients.

"By the time you have obstructive sleep apnea, you have been breathing poorly for a long time. Not everything can be reversed," Raphael says. "But just like rehab from any chronic ailment, lifestyle changes can reverse some and delay the progress of other symptoms, in this case, of bad breathing."

Patients who appear to be at risk should be encouraged to practice the "competencies" that lead to better breathing and sleep:

- Breathe gently through the nose
- Keep the lips together when not talking or eating
- Rest the tongue on the palate
- Swallow without using the facial or cervical muscles
- Maintain good posture to avoid straining those muscles
- Eat nourishing, not "challenging" foods
- Get enough restorative sleep
- Manage chronic stress by breathing properly throughout

For adults who are already suffering from advanced OSA, Raphael says, losing weight is no longer the only course of action available. Adopting as

many of the habits listed above will likely lead to a reduction in the severity of their symptoms and improve sleep.

An integrative orthodontics practitioner is not the last line of defense, he adds. Depending on the patient, otolaryngologists, allergists, physical therapists, and myofunctional therapists all have expertise and a role to play in minimizing the symptoms of sleep-disordered breathing.

"Dealing with the way the bones, muscles, nerves and functions of the face and head operate may require the collaboration of several healthcare practitioners at times, but remember, small changes in starting conditions can have a huge impact on the outcome for your health and wellbeing."

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