Treatment of Obstructive Sleep Apnea Syndrome

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The treatment of obstructive sleep apnea (OSA) in adults can be challenging. Treatment recommendations are based on a lot of factors, such as the severity of OSA, existence and extent of comorbid conditions, presenting symptoms, age, and patient preference. General management should be focused on lifestyle modification including weight control, avoidance of smoking and alcohol drinking, and discontinuation of drugs. Even if the primary treatment has been reported as continuous positive airway pressure (CPAP), a lot of patients cannot accept and be compliant for this therapy. For these patients, airway surgery and mandibular advancement devices (MAD) could be alternative treatments.

According to the past reports, CPAP compliance is less than 50% overall. And MAD also cannot be free from compliance problem and long-term complication in compliant patients. Airway surgery has problems of lower success rate and relapse even in successful patients. Therefore, the most important issues in treatment of OSA should be selection of the patients for each treatment and proper education and education to sustain their successful condition.

CPAP needs proper prescription of pressure and careful post treatment follow-up with education and encouragement. MAD also needs proper development of device, sleep study with MAD, and long-term follow-up with careful observation of occlusal change. Surgery also needs postoperative sleep study and education for preventing relapse. There are no treatments methods which omit post treatment education and follow-up. Physician should be ready to do long-term follow-up.

The definition of success is also challenging. The definition of good compliance or successful results should be focused not only to improve the patients symptoms but to reduce the complication rate after treatments. All the parameters of sleep study are not enough to explain successful by their own. There has been a lot of data for the CPAP to prevent complications of OSA and to improve symptoms. But other treatment methods have not shown enough data for the complications of OSA. Success of MAD and surgery may be considered as same as the results of CPAP, not just the data of titration of CPAP but the data including good compliance.

Treatment of OSA is not easy. There is no treatment method which can make successful results in all patients. Therefore, sleep doctors should take all the weapons to treat the OSA patients.