

What are the benefits of treating sleep apnea?

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■ EVIDENCE-BASED ANSWER

There is little benefit to treating patients with sleep apnea who do not have daytime sleepiness. For patients with symptoms, treating those with moderate to severe sleep apnea is more reliably associated with benefits than treating those with a mild case. Benefits include: decreased daytime sleepiness; improvements in subjective sleep quality in patient and sleep partner; improved psychologic well-being, cognitive function, and quality of life; decreased numbers of traffic accidents; and small decreases in blood pressure. (Grade of recommendation: B-, based primarily on cohort studies and case series and a small number of randomized controlled trials [RCTs])

■ EVIDENCE SUMMARY

Good evidence has existed for some time that treatment of obstructive sleep apnea (OSA) improves disease-oriented findings, such as disturbed sleep, oxygen desaturation, apneas, and hypopneas. However, evidence that supports patient-oriented improvement is less plentiful. A problem with evaluating benefits of treatment has been an abundance of case studies indicating good response to treatment but a lack of support for these studies by RCTs.

The Cochrane Database of Systematic Reviews includes treatment of OSA using surgery, lifestyle modifications, and continuous positive airways pressure (CPAP). Only a small portion of the available literature on OSA fits the stringent criteria for inclusion in this database. The review for treatment with CPAP indicates significant improvements in several quality-of-life and depression measures.¹ Some newer RCTs evaluating CPAP and oral devices are available that show more benefit.

A multicenter RCT comparing real and sham CPAP in patients without daytime sleepiness found no improvements in a variety of patient-oriented outcomes.² CPAP treatment has been shown in an RCT to improve subjective and objective sleepiness. For 73% of treated subjects, the sleepiness scores returned to normal (number needed to treat = 1.4). The CPAP users with the best compliance had the most improvement.³ In a crossover RCT of CPAP in patients with mild OSA, CPAP was shown to improve symptoms, cognitive function, psychologic wellbeing, and quality of life.⁴

CPAP has been shown to cause small decreases in blood pressure in normotensive patients. Systolic pressure fell most in those with more than 20 4% desaturations per hour, falling 4.0 mm Hg systolic and 5.0 mm Hg diastolic.⁵

■ RECOMMENDATIONS FROM OTHERS

The Cochrane Database recommends that surgery be restricted to that carried out as part of clinical trials because of the lack of evidence for benefit from surgery for OSA. CPAP is regarded as the therapy with the

most benefits, but oral appliances are best tolerated by patients. All patients should receive instruction and encouragement in lifestyle modification. Benefits of treatment are sufficient that patients prefer active treatment with its multiple hassles and expense over placebo.¹

CLINICAL COMMENTARY

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Many patients report dramatic improvements in daytime sleepiness and fatigue after initiation of CPAP treatment. If CPAP is not tolerated, treatment with intraoral devices or surgery can be considered, although the benefits of surgery are largely unproven. CPAP treatment of patients with severe sleep apnea has been shown in some trials to improve survival. Current studies do not clearly indicate whether treatment of mild to moderate OSA reduces long-term cardiovascular morbidity and mortality.

R E F E R E N C E S

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