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The Clear Link Between Metabolic Syndrome and Sleep Disorders

Metabolic syndrome, including obesity, high blood pressure, type 2 diabetes, hypertension and poor lipid profile, affects nearly 35 percent of all U.S. adults, and 50 percent of those 60 years of age or older, according to a study in JAMA.¹ As the Baby Boomers continue to age, the prevalence of these diseases will inevitably rise.

Metabolic syndrome is also thought to correlate with poor sleep and sleeping disorders like sleep apnea. The reverse is also true; studies have shown that short sleep duration is significantly associated with increased risk of metabolic syndrome.²

An increasing number of epidemiological studies show an association between short sleep duration, sleep disturbances, and circadian desynchronization of sleep with adverse metabolic traits, in particular, obesity and type 2 diabetes. Furthermore, experimental studies point to distinct mechanisms by which insufficient sleep adversely affects metabolic health.

Changes in the activity of neuroendocrine systems seem to be major mediators of the detrimental metabolic effects of insufficient sleep, through favoring neurobehavioral outcomes such as increased appetite, enhanced sensitivity to food stimuli, and, ultimately, a surplus in energy intake.³

Concomitant treatment of underlying sleep disorders and metabolic syndrome can help improve outcomes.³

Symptoms of Sleep Disorders

If a patient has metabolic syndrome, it's important to ask about sleep habits to effectively create a comprehensive treatment plan. Snoring alone is not an effective marker for diagnosing sleep disorders.⁴

Other symptoms of sleep disorders include excessive daytime sleepiness, observed episodes of breathing cessation during sleep, abrupt awakenings accompanied by gasping or choking, awakening with a dry mouth or sore throat, morning headache, difficulty concentrating during the day and nighttime sweating.

Risk Factors for Sleep Disorders

A patient is at risk for developing sleep apnea if they meet any following criteria:

- Overweight/obese (BMI over 30)
- High blood pressure
- Chronic nasal congestion
- Smoking
- Diabetes
- Asthma

Diagnosing Sleep Disorders

The diagnostic standard for obstructive sleep apnea is nocturnal polysomnography in a sleep laboratory.⁴ Other tests for diagnosing sleep disorders include Positive Airway Pressure (PAP) Titration Study, Home Sleep Testing (HST), Multiple Sleep Latency Test (MSLT), Multiple Wakefulness Test (MWT), Auto-PAP Titration Testing, Actigraphy Testing and Overnight Oximetry Testing.

Conclusion

Sleep loss is an appealing target for the prevention, and treatment, of metabolic disease. Somnas sleep and wake disorders center offers state-of-the-art diagnostic options to identify specific sleep disorders and manage them using the latest treatments and therapies in an individualized treatment plan. Our treatment services include behavioral therapy, lifestyle coaching, Positive Airway Pressure (PAP) therapy, sleep education and sleep medication management

Our office will work with you, communicating every step of the way for the overall health and wellbeing of your patients.

SOMNAS and Allergy Sleep & Lung Care are dedicated to improving and maintaining the health status of our patients by providing compassionate, top-quality care. A patient's special needs, concerns, and lifestyle, and those of their family, will guide our treatment planning. The care our patients receive with us will be on par with the highest national standards.



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Dr. Ahmad has been practicing pulmonary, critical care and sleep medicine in Lee County since 2004.

He has extensive clinical and academic experience and believes in a proactive approach to healthcare. His postgraduate training took place at the following well-respected institutions: Harvard University, Cornell University, State University of New York at Brooklyn and the University of Mississippi.

References:

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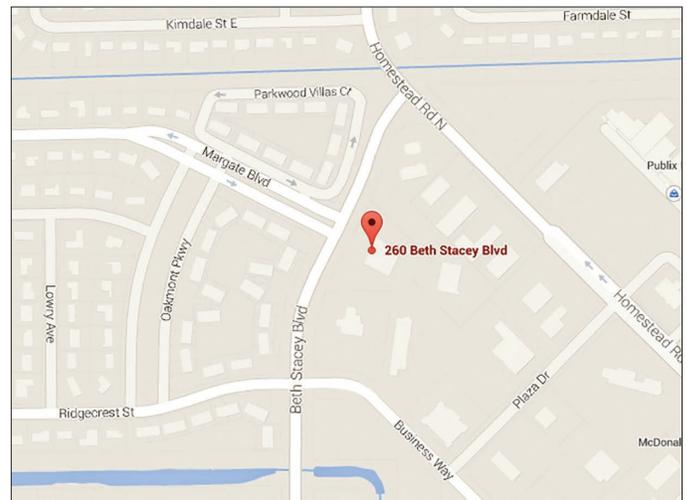
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