

# SLEEP MEDICINE UPDATE



A CLINICAL UPDATE FOR PHYSICIAN PRACTICES

Spring 2008

## Welcome to our newest clinical reference tool for medical practices

With this issue, Wellfirst Sleep Diagnostics begins a regular service with timely clinical updates from the field of sleep medicine. On a bimonthly schedule, this customized newsletter will summarize advances, research and academic information that is current in the field of sleep medicine, to assist you in better assessing, diagnosing and treating your patients with sleep disorders and related conditions.

The newsletter will be designed in a “quick-read,” snapshot format, since we know your time is valuable. As you peruse the newsletter, if you have comments, questions or input for our expert professional team, please feel free to contact us at **(LETS PUT A CUSTOM E-MAIL ADDRESS HERE)**.

It's just one more way in which Wellfirst Sleep Diagnostics brings you the most current, industry-leading services and support in the field of sleep diagnostics, for the benefit of your practice and your patients.

Happy reading!  
Gerry Jacob, Chief Executive Officer

*Rev Prat. 2007 Sep 30;57(14):1521-8.*

## Prevalence and comorbidity of sleep disorders in general population

*Ohayon MM.*

*Stanford Sleep Epidemiology Research Center, School of Medicine, Stanford University, Stanford, CA, USA. mohayon@stanford.edu*

Sleep disorders can be expressed in different ways. The International Classification of Sleep Disorders lists more than 80 different sleep disorder diagnoses. In general population, although the insomnia complaint is reported by nearly the third of the population, it is translated into a diagnosis of insomnia for only 6% to 15% of the population. Sleep apnea syndrome, often associated with insomnia or daytime sleepiness, is found in approximately 2% to 4% of the general population. Restless legs syndrome is present for approximately 6% of the general population with a higher prevalence in the elderly subject. Narcolepsy is rare with a prevalence of 0.04%. Parasomnias are less studied in the general population; prevalences of several of parasomnias remain unknown. Among those more extensively studied, sleep paralysis is found for approximately 6% of the general population. Nocturnal terrors, the confusional arousals and nightmares have been observed with prevalences ranging from 2.2% to 5%.

**CONCLUSION:** Despite their high frequency, sleep disorders remain poorly identified; less than 20% of individuals with sleep disorders are correctly diagnosed and treated.

*J Neurol Neurosurg Psychiatry. 2007 Dec;78(12):1293-7.*

## Clinical diagnosis and misdiagnosis of sleep disorders.

*Stores G.*

*University of Oxford, c/o North Gate House, 55 High Street, Dorchester on Thames, Oxon, OX10 7HN, UK. gregory.stores@psych.ox.ac.uk*

To illustrate this problem, examples are provided of the various possible causes of sleep loss, poor quality sleep, excessive daytime sleepiness and episodes of disturbed behaviour at night (parasomnias). All of these sleep disorders can adversely affect mental state and behaviour, daytime performance or physical health, the true cause of which needs to be recognised by clinicians to ensure that appropriate treatment is provided. As conventional history taking in neurology and psychiatry pays little attention to sleep and its possible disorders, suggestions are made concerning the enquiries that could be included in history taking schedules to increase the likelihood that sleep disorders will be correctly identified.

**CONCLUSION:** Sleep disorders are common in all sections of the population and are either the main clinical complaint or a frequent complication of many conditions for which patients are seen in primary care or specialist services. However, the subject is poorly covered in medical education. A major consequence is that the manifestations of the many sleep disorders now identified are likely to be misinterpreted as other clinical conditions of a physical or psychological nature, especially neurological or psychiatric disorders.



Anadolu Kardiyol Derg. 2007 Dec;7(4):378-82.

## Relationship between the severity of obstructive sleep apnea and hypertension

Bayram NA, Ciftçi B, Güven SF, Bayram H, Diker E.  
Ankara Atatürk Göğüs Hastalıkları ve Göğüs Cerrahisi Eğitim ve Araştırma Hastanesi, Ankara, Türkiye. drmhkar@yahoo.co.uk

**OBJECTIVE:** Obstructive sleep apnea syndrome (OSAS) is a syndrome defined frequently by decrease in arterial oxygen saturation and repeated upper airway obstruction episodes during sleep. The most important complications of OSAS patients belong to cardiovascular system. Systemic arterial hypertension (43-60%), pulmonary hypertension (20-30%), coronary artery disease (20-30%) and congestive heart failure (5-10%) are among OSAS associated cardiovascular disease spectrum. In this study, we investigated the frequency of hypertension (HT), which is the most common cardiovascular disease seen in patients admitted with OSAS suspicion. Hypertension was present in 4 (7.4%) of 54 OSAS negative patients and 56 (36.8%) of 209 patients with OSAS, the difference was significant ( $p=0.001$ ). When we assessed mild OSAS patients and moderate-severe OSAS patients in terms of HT frequency, HT was present in a lower rate in mild OSAS patients as compared with patients with moderate-severe OSAS (3/26 versus 53/183;  $p=0.044$ ). When we compared OSAS negative patients with moderate-severe OSAS patients, HT was less frequently found in OSAS negative patients (4/54 versus 53/183,  $p=0.001$ ).

**CONCLUSION:** It is determined that hypertension was more frequently seen in patients with OSAS than in patients without OSAS and that HT frequency increased in parallel to the severity of OSAS.

Chest. 2008 Jan;133(1):86-91. Epub 2007 Oct 20.

## Continuous positive airway pressure therapy improves cardiovascular autonomic function for persons with sleep-disordered breathing.

Maser RE, Lenhard MJ, Rizzo AA, Vasile AA.  
Department of Medical Technology, 305F Willard Hall Education Building, University of Delaware, Newark, DE 19716. rmaser@udel.edu.

**BACKGROUND:** Sleep-disordered breathing (SDB) is an independent risk factor for cardiovascular morbidity. Dysfunction of the cardiovascular autonomic nervous system may be a potential mechanism whereby SDB is linked to cardiovascular disease. Repetitive sympathetic activation during apneic episodes may impair cardiovascular reflex function, and increased sympathetic activity can stimulate renin release. Given that patients with SDB may have reduced cardiovascular autonomic function, the purpose of this study was to determine whether treatment with continuous posi-

tive airway pressure (CPAP) for 6 weeks would improve autonomic function. **RESULTS:** Participants in this study showed improved cardiovascular autonomic function after 6 weeks of treatment (baseline vs follow-up) as assessed by the mean ( $\pm$  SD) MCR (33.2  $\pm$  22.5 vs 36.9  $\pm$  24.2, respectively;  $p < 0.05$ ) and E/I ratio (1.20  $\pm$  0.12 vs 1.24  $\pm$  0.14, respectively;  $p < 0.01$ ). Improved vagal tone was also noted for subjects with elevated renin levels.

**CONCLUSION:** Treatment of SDB with CPAP for 6 weeks improved vagal tone and may be beneficial in reducing the risk of developing clinical manifestations of cardiovascular autonomic dysfunction (eg, increased risk of mortality).

Prim Care Companion J Clin Psychiatry. 2007;9(5):338-345.

## Morbidity Associated With Sleep Disorders in Primary Care: A Longitudinal Cohort Study.

Wallander MA, Johansson S, Ruigómez A, García Rodríguez LA, Jones R.  
AstraZeneca R & D, Mölndal, Sweden; the Department of Public Health and Caring Science, Uppsala University, Sweden; the Section of Preventive Cardiology, Göteborg University, Sweden; Centro Español de Investigación Farmacoepidemiológica, Madrid, Spain; and the Department of General Practice and Primary Care, King's College London, United Kingdom.

**OBJECTIVE:** Few epidemiologic studies evaluate the relative contribution of different risk factors on sleep problems. The aim of the present study was to assess demographics, comorbid characteristics, and health outcomes in patients with sleep disorders. **Method:** A population-based cohort study with nested case-control analysis was conducted in adults using the U.K. General Practice Research Database. Information was collected for 12,437 patients with a new sleep disorder diagnosis during the year 1996 and 18,350 age- and sex-matched controls.

There was a clear association of sleep disorders with smoking and excessive alcohol consumption; prior psychiatric disorders, including stress (OR = 3.6, 95% CI = 2.9 to 4.4) and depression (OR = 3.1, 95% CI = 2.8 to 3.3); prior circulatory diseases, including heart failure (OR = 1.8, 95% CI = 1.4 to 2.2) and coronary heart disease (OR = 1.4, 95% CI = 1.2 to 1.6); and prior gastrointestinal diseases, including gastroesophageal reflux disease (OR = 1.4, 95% CI = 1.2 to 1.7) and irritable bowel syndrome (OR = 1.5, 95% CI = 1.2 to 1.9). Use of hypnotics and anti-depressants was increased in the year after diagnosis. Relative 1-year mortality risk was 3-fold higher in the sleep disorder group than in controls, with a noticeably higher proportion of deaths due to suicide.

**CONCLUSION:** The fact that sleep disorders were associated with several morbidities, most strongly with psychiatric disorders as well as with increased mortality, underscores the importance of sleep problems as indicators of health status.



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