

The

# SOUND SLEEPER

The quarterly newsletter of the Sleep Apnea Patient Support Group of Central Contra Costa County  
~ our 17<sup>th</sup> year ~

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## THE SOUND SLEEPER

The "Sound Sleeper" is the newsletter of the Central Contra Costa County Sleep Apnea Patient Support Group founded in 1994. The name "Sound Sleeper" comes from the euphoric sensation of awaking from a sound night's sleep once Sleep Apnea treatment has commenced. It is available via e-mail (as a .pdf) or by "snail-mail." Contact "Amy" at: [contracostasleepcenter@hotmail.com](mailto:contracostasleepcenter@hotmail.com) To offer editorial comment contact Dick Griffiths at: [r.b.griff@sbcglobal.net](mailto:r.b.griff@sbcglobal.net)

## THE SUPPORT GROUP

The Sleep Apnea support group provides to those diagnosed as having Sleep Apnea, a variety of services in the areas of education and patient support so that the full health benefits of their prescribed individual treatment may be achieved through "compliance" with prescribed treatment. The support group is open to all patients and their families in Central Contra Costa County.

## SUPPORT GROUP MEETINGS

There is no membership fee for participation in the Support Group meetings held in the Ball Auditorium, John Muir Medical Center, 1601 Ygnacio Valley Road, Walnut Creek from 7:00 - 8:30 PM on the 3rd Thursday in January, April, July and October. These meetings are sponsored by: the John Muir Medical Center and the Contra Costa Sleep Center.

## WHAT IS SLEEP APNEA?

Simply stated, Sleep Apnea is a very common physical disorder that causes some people to frequently cease breathing while sleeping. Sleep Apnea is a very serious health problem if left untreated! It has been estimated that 90% of people who have Sleep Apnea don't know they have it!

## YOU COULD SAVE A LIFE!

Do you know someone who you think may have Sleep Apnea? If so, suggest they contact a Respiratory Physician or the American Sleep Apnea Association at: 1424 K Street, NW, Suite 302, Washington, DC 20005 and they will send a packet of information. You may also call them at (202) 293-3650, FAX at (202) 293-3656, or via the internet at: [www.sleepapnea.org](http://www.sleepapnea.org)

## "WHAT'S NEW IN SLEEP APNEA"



Harry J. MacDannald, MD

Dr. Harry MacDannald, a Pulmonary and Sleep Physician in the John Muir Physician Network, spoke at the fall meeting of the Support Group on "What's New in Sleep Apnea" - a review of Sleep Apnea basics updated with the latest in research findings.

He opened with the question, "Why Do We Sleep?" All animals sleep. We cannot function without sleep. Sleep is restorative and the amount of sleep we need changes with age from 15 hours/day as infants to 6 hours for those over 70 years of age.

Sleepiness, or its more serious form - sleep deprivation, predisposes an individual to developing serious performance decrements in multiple areas of function, potentially life-threatening domestic, work-related and driving accidents, social embarrassment, memory and concentration difficulties, depression and a

general impaired quality of life.

Excessive sleepiness is a sign of sleep deprivation. It has many causes. Chief among them is Sleep Apnea. Simply stated, Sleep Apnea is a very common physical disorder that causes some people to frequently cease breathing while sleeping. Sleep Apnea is a very serious health problem if left untreated. It has been estimated that 90% of people who have Sleep Apnea don't know they have it! One measure of sleepiness is a very simple questioner called the Epworth Sleepiness Scale which can be self-administered (see following article).

Another potential indicator of the propensity for Sleep Apnea is the patient's Body Mass. A Body Mass Index can be calculated by taking one's weight in kilograms and dividing it by the height in meters squared ( $BMI = \text{weight} \div \text{height in meters}^2$ ) A result of 18.5-24.9 is considered healthy weight, 25.0 to 29.9 is overweight, 30.0-39.9 is obese and 40 and above is considered to be severely obese. It has also been found that the risk of Sleep Apnea increases with neck size. For men the suspect range is a 17" collar, for women it is a 16" collar.

The only positive means of making a positive diagnosis of Sleep Apnea is via a clinical study with the tongue twisting title of a "Polyomnography Montage" (a.k.a. a "Sleep Study"). These studies, performed in a sleep center, measure every physical aspect contributing to Sleep Apnea; sleep staging, respiratory measures, electrocardiography, oxygen saturation, limb movement, position monitoring, carbon dioxide emission and video monitoring. The sleep physician is looking for indications of Apneas and Hypopneas - [the total number of complete cessations (apnea) and partial obstructions (hypopnea) of breathing occurring per hour of sleep]. These pauses in breathing must last for 10 seconds

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and are generally associated with a decrease in oxygenation of the blood.

The net result of these studies indicate a patient's REM ("rapid eye movement") sleep time compared with a norm for adults of 14-19% and Apnea/Hypopnea Index (AHI) in the following ranges: Normal = 5/hr, Mild = 5-15/hr, Moderate = 16-30/hr and Severe = more than 30/hr.

A very intensive and thorough question and answer session followed Dr. MacDannald's talk with no question left unanswered!

## THE EPWORTH SLEEPINESS SCALE

Are you always sleepy or exhausted? Do you suspect you have a sleep disorder? Do you know someone who you think might have a sleep disorder? The Epworth Sleepiness Scale questionnaire (below and previous article), developed by sleep researchers in Australia is a quick and convenient way to screen for extreme daytime sleepiness, which is usually caused by a sleep disorder such as Sleep Apnea.

What is your likelihood of dozing off while (indicate; None=0, Slight=1, Moderate=2, High=3):

- \_\_\_ sitting and reading?
- \_\_\_ watching TV?
- \_\_\_ sitting in a theater or classroom?
- \_\_\_ riding in a car for hour or more?
- \_\_\_ lying down to rest during the day?
- \_\_\_ sitting and talking to someone?
- \_\_\_ sitting by yourself after lunch ?
- \_\_\_ sitting in a car stopped in traffic for a few minutes?

**0-9** = Normal daytime sleepiness range. This normal range overlaps with scores of people who have milder sleep disorders, so if you feel you have trouble sleeping or you wake up tired, go ahead and talk to your doctor about your symptoms. Ask if you could benefit from an evaluation at a sleep clinic.

**10-15** = Moderately high daytime sleepiness, which often signals a sleep disorder such as sleep apnea. You should talk to your doctor about your symptoms soon, and also ask about a referral to a sleep clinic.

**16 and over** = Very high daytime sleepiness, which is a likely sign of a significant sleep disorder. You should talk to your doctor about your symptoms as soon as possible, and get a referral to a sleep clinic.

## SLEEP APNEA AND HYPERTENSION

A study conducted by the Dept. of Respiratory Medicine and Hypertension Clinic, at the Austin Medical Centre, Victoria, Australia revealed a strong link between the presence of (untreated) Obstructive Sleep Apnea and both untreated and treated hypertensive patients. Their analysis showed that body mass index, age, sex, treated hypertension and untreated hyper-tension were all associated with the presence of (untreated) sleep apnea.

## OSA & GASTRIC REFLUX

(from "Wake-Up Call")

The relationship between sleep apnea and gastric reflux - the entry of acidic stomach fluids into the esophagus or swallowing tube in the chest has been clearly established. It has been found in a number of studies that when people breathe against an obstructed airway, they generate very negative pressures in the lung and chest cavity as the diaphragm contracts strongly. That tends to violate the juncture between the stomach and esophagus and allow the reflex of gastric contents into the esophagus.

When sleep apnea is adequately treated - **and with CPAP in particular** - the negative pressure generated from breathing against the (obstructed) airway is relieved. That tends to decrease the propensity for stomach contents to enter the esophagus. Hence proper sleep apnea therapy can dramatically reduce systems of gastric reflux.



## THE PHYSICIAN'S CORNER

by Harry J MacDannald MD

### Sleep Cycle Disorders

All animals on this earth are in synchronization with the sun. Likewise, we humans tie all of our activities to the day and

night rhythms of the sun. Our workdays, schools, commerce and personal activities are dictated by the time of day and these cyclical rhythms are called Circadian Rhythms (from the Latin; meaning about one day). We arise about the same time each day and retire about the same time each night, if our workday is daytime. When our sleep-wake patterns become altered, we try to adapt to the new hours, and sometimes this is difficult and we experience a Sleep Cycle Disorder.

There are a number of situations when we have to adapt our waking hours. Twice a year we have to adapt to Daylight Savings Time changes. Traveling across different time zones obviously requires us to adapt to the new time zone. Traveling in an easterly direction is more difficult than traveling westward as we have to arise earlier and fall to sleep earlier than we are accustomed to and are more likely to experience "Jet Lag" when traveling east. If we have the misfortune to have a job with rotating shifts, then every shift rotation causes an upheaval of our sleep patterns. Other Circadian Rhythm disorders are the Advanced Sleep Phase Syndrome when people fall asleep earlier than normal. The Delayed Sleep Phase Syndrome occurs when people fall asleep more than two hours later than their desired bedtimes.

Some symptoms that one can experience with sleep cycle disorders are feeling lethargic one moment and energetic the next. The result is that we feel excessively sleepy during the day or wide-awake at night. People may experience circadian rhythm disorders in varying degrees. The body is reacting to a change in the schedule of normal activities. People experiencing sleep cycle changes have a difficult time maintaining their internal, routine sleep-wake pattern in their new time change, because external stimuli, like sunshine and local timetables, dictate a different pattern of activities. For this reason, in general, the severity of symptoms is directly related to the number of time zones crossed by a flight or the number of hours of shift work change.

All age groups are susceptible, but individuals over the age of 50 are more likely to develop symptoms than those under the age of 30. Also, individual susceptibility tends to vary considerably and it is possible that pre-existing sleep deprivation will intensify symptoms. Jet lag is a unique sleep disorder because its onset is not necessarily caused by abnormal sleep patterns, like insomnia. Travelers who sleep normally prior to trans-meridian travel are not immune to jet lag.

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