

### VOL. 13, NO. 3

### 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 furnishes information and items of educational interest to those who have Obstructive Sleep Apnea (OSA) and is available via e-mail (as a .pdf) or by "snail-mail." To be placed on the distribution list contact "Amy" at the Contra Costa Sleep Center: info@ccsleepcenter.com To offer editorial comment re: the "Sound Sleeper" please contact Dick Griffiths at: 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." 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?

Sleep Apnea is a physical disorder that causes some people to frequently cease breathing while sleeping. Sleep Apnea is a very serious health problem if left untreated!

### 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 on the web at: < www.sleepapnea.org > or e-mail at: < <u>asaa@sleepapnea.org</u> >

WALNUT CREEK, CALIFORNIA

# **A COMPREHENSIVE REVIEW OF SLEEP APNEA** AND ITS TREATMENT

The Spring 2009 Support Group meeting was treated to a comprehensive review of Sleep Apnea and its treatment by Dr. Manjari Nathan

She opened her review with the statement that 70 Million people suffer from sleep disorders and 25 Million of these are related to sleep disordered breathing.

Dr. Nathan defined Sleep Apnea as a chronic respiratory sleep disorder characterized by recurrent episodes of partial or complete upper air obstruction during sleep (apneas, hypopneas) and are associated with repeated disruptions of sleep resulting in excessive daytime sleepiness and other medical problems.

An Apnea is a complete cessation of breathing lasting 10 seconds or more whereas a Hypopnea is reduced airflow to about 50% lasting 10 seconds or more. An Apnea Hypopnea Index (AHI) is the number of these occurrences totaled per hour. Mild Obstructive Sleep Apnea (OSA) would be represented by an AHI of 5-15, Moderate by 15-30 and Severe above 30.

The risk in Sleep Disordered Breathing is multifold; increased traffic accident mortality, lower productivity, a whole host of physical problems including sudden death, and impaired; mood, vigilance, concentration and memory functions.

(AHI >20) suffering a stroke in the next four vears are significantly higher.

There are also negative metabolic and pulmonary effects.

Many options exist for the treatment of Sleep Apnea, Dr. Nathan stated. Weight loss, avoidance of drug and alcohol use, smoking cessation, postural training, nasal patency, dental appliances, CPAP/BiPAP and Surgery. She noted that CPAP compliance is poor in up to 40% of patients and needs to be used at least six hours nightly.

Surgery, particularly UPPP has a 50% success rate. Other surgical techniques include tongue advancement, hyoid bone elevation, repositioning of the upper and/or lower jaw and radiofrequency removal of excess airway tissue.

An extended question and answer session followed presentation.

### **INSIGHTS INTO REM**

REM (Rapid Eye Movement) sleep is a period of intense brain activity, vivid dreams and oxygen and glucose consumption equal to or higher than in the brain while in a waking state. "The implication is that the brain, which generates and evidently benefits from sleep, seems to be to busy to get any sleep itself." This insight into REM comes from an article in the Smithsonian magazine (Oct 2003) discussing the work of Eugene Aserinsky and Nathaniel Kleitman who they cite as the discovers of REM in 1953.

The article goes on to say, "Today it's well established that normal sleep in human adults includes between four and six REM periods a night. The first starts about 90 minutes after sleep begins; it usually lasts several minutes.

### NEXT SUPPORT GROUP MEETING - 7PM, THURSDAY, JULY16<sup>™</sup>

Each subsequent REM period is longer. REM sleep is characterized by not only brain-wave activity typical of waking but also a sort of muscular paralysis which renders one incapable of acting on motor impulses. (Sleep walking most often occurs during non-REM sleep.) In men and women blood flow to the genitals is increased. Parts of the brain burn more energy. The heart may beat up to 10% faster and respiration 20%."

"Adults spend about two hours a night in REM, or 25% of their sleep in REM. If you deprive a person of REM sleep, they'll recoup it at the first chance, plunging directly into the REM phase - a phenomenon discovered by Dr. William C. Dement at Stanford."

## A LIGHTWEIGHT CPAP BATTERY BACKUP



Looking for a small, sleek, ultra-portable, way to power your CPAP or BiPAP? Available in 2 different sizes, this Lithium-Ion battery is sure to work with your device and provide a full night's (or two with the larger size) sleep without recharging.

The TSA approved "Super CPAP battery" is small enough to take on a red-eye flight and powerful enough to keep CPAP machines running throughout long international flights. The leather travel case and international AC charger makes it an ideal travel companion. For more information and prices go on the web and search for: Super CPAP Battery.

# UNTREATED OSA MAY DAMAGE BRAIN

June 4, 2009 - University of New South Wales researchers have found snoring associated with untreated sleep apnea may impair brain biochemistry like people who have had a severe stroke. The study used magnetic resonance spectroscopy to study the brains of 13 men with severe, untreated, obstructive sleep apnea.

The findings show that "lack of oxygen while asleep may be far more detrimental than when awake, possibly because the normal compensatory mechanisms don't work as well when you are asleep similar to what you see in somebody who has had a very severe stroke or is dying."



## WHEN THINGS GO WRONG WITH CPAP

(Courtesy: the American Sleep Apnea Association)

CPAP is, at the present, the most effective treatment for obstructive sleep apnea. It is, however, only a treatment and has no benefit if it is not used. Current research estimates that the compliance rate for CPAP (how many people use CPAP more than a few months) is approximately 60%. One reason for this may be that CPAP users often experience disagreeable side effects and simply stop using CPAP.

Many of these side effects can easily be addressed if a health professional is made aware of the problem or if the CPAP user is educated about ways to manage these problems.

**Mask discomfort** This problem usually arises because either the patient adjusts the headgear too tight or because the mask does not fit properly. A CPAP mask should fit the face snuggly to avoid air leak but not so tight that is feels uncomfortable or causes pain. If a mask has to be pulled tightly to prevent leaks the *mask does not fit properly!* You should contact your sleep specialist and let them know that your mask may not fit well and you would like to try another size or *style* mask. There are a number of makers of CPAP masks and not every nose can wear every mask. Do not let anyone tell you that a sore on your nose is to be expected!

Nasal congestion, irritation or runny nose that seems to be caused by using CPAP Your nose is your airway's humidifier. It warms and humidifies the air that you breathe. If the CPAP begins to dry your nose, your body will increase the production of mucus in the nose to add more moisture to the inhaled air.

Unfortunately, this may cause nasal congestion and a runny nose. In some cases the dryness will cause irritation, burning and sneezing. These symptoms can be alleviated by the use of a humidifier with your CPAP. Some sleep specialists order a passover (cold water) humidifier with the initial CPAP order. If you do not have one of these speak with your sleep specialist. If you already have a humidifier and still experience these symptoms you may need a heated humidifier. This is a water pan that sits on a heating unit and is attached to CPAP just like the passover humidifier. Heating the air and the water will allow the air to carry more moisture as it travels to your nose (just like the summer air is more humid than winter air). In almost all cases this resolves nasal congestion and irritation if it is caused by CPAP.

Difficulty breathing through your nose If you have allergies, chronic sinus problems or a deviated septum (your nose is crooked on the inside) you may have trouble using CPAP. CPAP is usually applied through the nose. If during the day you often find yourself breathing through your mouth, CPAP may be difficult to use. If the problem is allergies speak with your doctor about treatment. There are a number of good nasal steroid sprays and allergy medications that can treat your nasal congestion. Individuals with a deviated septum or other structural problems in their noses may benefit from seeing an Ear Nose and Throat specialist if CPAP cannot be tolerated. Finally, there are CPAP masks that fit over both the mouth as well as the nose. People have used these with varying success but it may be worthwhile to try a "full face mask" before looking into other alternatives.

Headache or ear pressure Although treating sleep apnea usually eliminates morning headache, some CPAP users develop headaches on CPAP. Others find that their ears develop pressure or pain in them. Most of this relates to underlying sinus congestion due to allergies or to CPAP itself. It is much like traveling in an airplane when you have a cold. The congestion can block the ear canals and changes in air pressure can cause pain when air gets trapped. It is best to avoid using CPAP when you have a cold or sinus infection to avoid these problems. Sometimes the congestion remains in the ears and sinuses after the acute symptoms of the cold are gone. If you develop headache or ear pain on CPAP, speak with you sleep specialist. In the interim you may try decongestants or antihistamines. (Always check with your doctor before you take these medications).

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