

THE SOUND SLEEPER

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

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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 as a .pdf document via e-mail. To be placed on the e-mailing list send your request to "Amy" at: contracostasleepcenter@hotmail.com To offer editorial comment 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" 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 Sleep 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

WHAT WAS NEW AT THE "VENDOR FAIR"

The annual Support Group "Vendor Fair" was held in July and was well attended by members and the medical equipment supply community. The CPAP manufacturers were represented by; Respironics and Fisher & Paykel. Representatives from the Contra Costa Sleep Center and from the Durable Medical Equipment supplier, OxygenPlus, were present to explain their services.

Dr. Peter F. Chase DDS MA also was present at the Vendor Fair this year. Dr. Chase has spoken before the support group on several occasions in the past and is now associated with the Contra Costa Sleep Center specializing in the application of oral appliances for mild/moderate Obstructive Sleep Apnea treatment.

The manufacturer's emphasis this year was on redesigned and more comfortable nasal pillows and masks in addition to state of the art software controlled CPAP machines. Respironics exhibited their new unique in shape "GoLife" nasal pillows custom designed for both men and women and their "TrueBlue" gel nasal mask as well as their "System One" intelligent CPAP machine.



Respironics "GoLife" Nasal Pillows

More information on the Respironics product line can be found at their website: <http://respironicsleeptherapysystems.respironics.com/>

Fisher & Paykel was present to describe the three new "Zest" Range nasal masks designed to fit better, feel lighter and be easier to use.



Fisher & Paykel "Zest" nasal mask

More information on the "Zest" Range nasal Masks and Fisher & Paykel's full range of "ICON" clinical therapy solutions on their website: www.fphcare.com/osa/cpap-solutions.html Although unable to attend this year's Vendor Fair, ResMed, also has a full line of nasal pillows, masks and system solutions. Information can be obtained at their website: <http://www.resmed.com/us/index.html>

30 YEARS AGO CPAP WAS INVENTED!

Thirty years ago Dr. Colin Sullivan, an Australian pulmonologist studying the problem of airway collapse, hit on CPAP as a possible solution. Here, (extracted), is how he described it in the *Lancet* 1981;1:862-65. "One afternoon we were setting up for a nighttime study on a patient with severe OSA who was to have a tracheotomy. He was participating in a series of nightly studies before and after the procedure to measure breathing while he was asleep. The patient was eager to know if there was anything else that might work. I suppose I

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Ball Auditorium, John Muir Medical Center, Walnut Creek

was thinking out loud, looking at the mask and all the tubing sitting around for the experimental procedure, when it occurred to me that putting pressure in the upper airway might just hold it open.



Dr. Colin Sullivan PhD, BSc(Med), MB FRACP
Professor of Medicine at Sydney University

The patient was keen to give it a try, and so we started searching around for equipment that we could use. We had large bore tubing into which we cut holes for the nasal prongs (*pillows*) to fit.

Our next problem was finding a blower to create an appropriate pressure. We had a blower we used to calibrate the Fleish pneumotach (*airflow measuring device*) and thought that might work. In hours, the first CPAP device for OSA was born.

We were very tentative going into this, not knowing what would happen, how the patient might respond or even if we might 'blow the patient up.'

What we weren't prepared for was how quickly and easily we were able to unblock the upper airway obstruction. As we turned the pressure up, the obstruction disappeared, and the patient went immediately into REM (*sleep*). We then reduced the pressure and recreated the classic obstructive pattern. Turning the pressure up again relieved the obstruction. After a few runs of switching the apnea on and off by changing the pressure level, we realized what a fantastic physiological tool we now had to study obstructive sleep apnea and mechanisms.

However, it wasn't obvious to me at this stage that this could be a long-term treatment for the patient. Although we had

planned to use the pressurized system for just a short time during that first night, the impressive response in terms of sleep quality and respiratory, as well as the patient's tolerance to it, made me decide to continue on for the whole night. After all, just because it worked for five minutes, it didn't mean it would work for five hours

You have to remember, (*in 1981*) we knew the airway was collapsing, but no one knew why. Was this passive collapse, or was it an active response? I reasoned that if what we were seeing was a reflexive response, then the patient would adapt to the continuous pressure over time. On the other hand, if it was a physical problem of passive collapse, then CPAP would act as a splint and no adaptation would be seen.

I realized that we could answer that question by the end of the night so we continued with pressurization. And we had an extremely satisfied and rested patient next morning. The results we saw were absolutely clear-cut, and I knew right away that the upper airway obstruction was a passive process by how easy it was to unobstruct the airway."



The First CPAP Machine (1981)

..... and thus was born the device that has benefitted the one in every 15 people worldwide who suffer from Obstructive Sleep Apnea.

**WOULD YOU LIKE TO RECEIVE
MEETING NOTICES &
THE SOUND SLEEPER BY
E-MAIL? CONTACT AMY @
contracostasleepcenter@hotmail.com**



THE PHYSICIAN'S CORNER

by Harry J MacDannald MD

Gender Differences Of Sleep Disordered Breathing

Many studies have shown that men have more sleep disordered breathing problems than women. The one study showed that men had 3 times more sleep apnea than women when compared for Body Mass Index (BMI).

It is known that obesity is a risk for sleep apnea and accounts for 80% of male patients, but 20% of patients are thin or normal weight. Women have less sleep apnea with obesity for unclear reasons, but obesity is still an important risk factor for women also.

It is also known that a larger neck circumference also has more risk for sleep apnea in both men and women. If men have greater than 18 inch collar size, they will more likely to have sleep apnea. If women have a greater than 16 inch collar they will more likely to have sleep apnea.

The upper airway mechanics and muscle tone are important for maintaining an open airway during sleep. Men experience more airway obstruction and collapse than women. Men do have a longer airway length and this may allow for more obstruction. Even though women have smaller upper airways, they have more favorable airway mechanics than men.

Pre-menopausal women appear to be protected as are post-menopausal women with hormone-replacement therapy. After menopause, the risk of obstructive sleep apnea increases in women by 4-fold. This marked increase compares to almost as much as males of the same age.

Much still needs to be learned about disordered breathing during sleep and the search goes on.

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