



WAKE-UP CALL

FROM THE AMERICAN SLEEP APNEA ASSOCIATION

CELEBRATING OUR 20TH YEAR

FALL 2010

ASAA A.W.A.K.E. NETWORK NEWS

August picnics bring in the crowds, it would seem, at least in Michigan. **The Northern Michigan A.W.A.K.E. Group** sponsored by the Northern Michigan Regional Hospital Sleep Centers staged two a week apart, the first on Aug. 19 in Petoskey, MI, the second on Aug. 26 in Gaylord, MI. The first attracted 65 patients and their supporters and 23 sponsors, the second 40 patients and supporters and 61 sponsors. Both events included a speaker and ample time to examine and learn about new PAP equipment. And one might reasonably assume all went home tired but happy.

The A.W.A.K.E. Network continues to grow. **Smyrna, TN, A.W.A.K.E.** held its first meeting Aug. 19. **East Providence/Warwick, RI, A.W.A.K.E.** had its first meeting Sept. 27.

Attention, coordinators: Most of the material that appears in the A.W.A.K.E. Network news column in each issue of *Wake-up Call* is drawn from your meeting summary reports. Something happens at many A.W.A.K.E. group meetings that would be of interest to others in the network, but they won't hear about it unless you tell us. When you fill out the report form, don't stop with simply noting the number who attended and the speaker's topic. Please tell us about something that was said or that happened that might be of wider interest.

Here's an example. One group recently heard a physician discuss "Sleep Apnea and Dementia." This is an out-of-the-ordinary topic. But the summary submitted included nothing on what the physician said. Readers who had no idea there might be an association between sleep apnea and dementia almost certainly would like to know more about it. ■

A.W.A.K.E. — ALERT, WELL, AND KEEPING ENERGETIC

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How OSA shapes heart disease Some current thinking by a renowned researcher



Dr. Virend Somers, Mayo Clinic

When a sleeping person fails to breathe, at least four things can happen, each of which has a long-term ill effect on the cardiovascular system, says Dr. Virend Somers of the Mayo Clinic in Rochester, MN. Somers is one of the nation's leading experts on the association between heart disease and sleep apnea.

First, said Somers, speaking in a telephone interview, the body reacts to its oxygen deprivation with a burst of central nervous system activity that leads to an increase in blood pressure. (Normally blood pressure falls during sleep.)

Then, changes occur in the inner lining of the blood vessels, the endothelium, potentially causing long-term damage to the vessels.

Meantime, the negative pressure in the chest cavity that results from the unsuccessful effort to inhale creates a vacuum around the heart that may predispose it to atrial fibrillation.

Finally, a falling oxygen level in the blood may produce substances in the blood that make it more likely to clot. Blood clots are the major cause of heart attacks.

The South African-born Somers completed his initial medical studies at the University of Natal, subsequently earned a D.Phil. at Oxford University in England, and then held a post-doctoral fellowship in cardiovascular diseases at the University of Iowa. While he was at Oxford, Somers noticed that some of his research subjects experienced surges in blood pressure and heart rate during the night. He wondered why, but the medical literature of the time offered few clues until he heard about sleep apnea.

As he studied further, he uncovered a possible family connection.

"It became clear to me that my grandfather, who had died in his sleep, probably had severe sleep apnea," Somers told a University of Iowa interviewer a few years ago. Indeed, most heart attacks occur in the morning after awakening, Somers said, but sleep apnea sufferers typically experience heart attacks and/or sudden death while they are asleep. His research team reported these findings in two recent papers published in the *New England Journal of Medicine* and in the *Journal of the American College of Cardiology*.

At Mayo, where Somers is a professor of medicine at Mayo Medical School, his particular research interest is in the role of the autonomic (involuntary) nervous system in regulating the circulatory system, with an emphasis on the effects normal and disordered sleep have on it.

"We are exploring why people die during sleep," he told the UI interviewer. "Why is it the greatest risk of a cardiovascular event occurs in early morning after waking, and what is it about sleep deprivation that may promote cardiovascular damage?"

Researchers these days are giving particularly close attention to the changes in the endothelium that affect blood pressure, Somers said in the telephone interview, and are following these changes down to the molecular level.

A Letter from Executive Director Edward Grandi



On the facing page, in the column headed “ASAA in Brief,” are listed our corporate members, 24 businesses who have chosen to support our work financially. Most of them sell products or services to the sleep apnea community. This support is important to us as an income stream that pays for a significant part of our work. We honor our corporate members.

But we honor equally our individual members, and that’s where you, the individual who is reading this letter at this moment, come in.

Turn to the last page of this of *Wake-up Call* and you’ll be confronted by this question: “Is your membership up to date?”

Well, is it?

If you are not sure of your membership status, shoot me an e-mail at egrandi@sleepapnea.org or give me a call at 202-293-3650 and I’ll tell you. If you know you are not now a member, I hope you will want to become one. Our individual members are very important to us. They offer a continuing assurance that the ASAA, a patient-driven organization, is doing the right thing for its constituents, gathering and disseminating information about sleep apnea and other sleep disorders that is balanced, useful, and timely.

Our patient membership has fallen off a bit in the past couple of years, perhaps as a consequence of the general financial downturn, perhaps because we haven’t made enough of a case for it in *Wake-up Call* and at www.sleepapnea.org. We need to build up the individual membership roll.

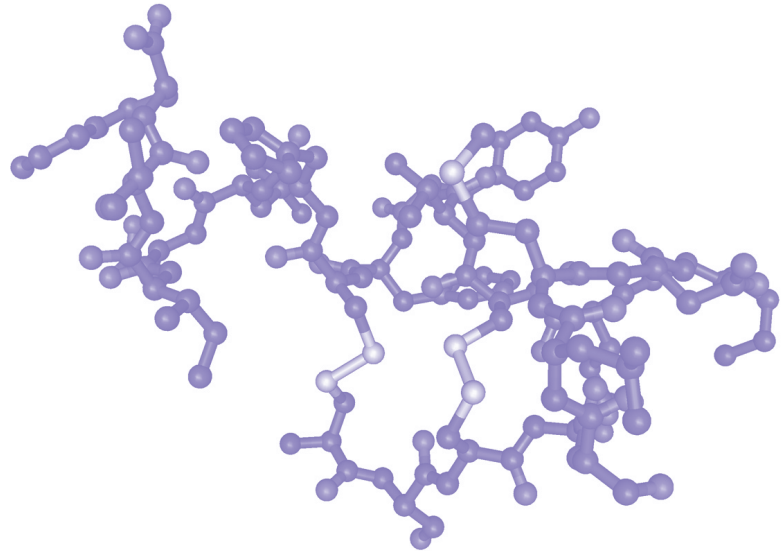
So let me remind you, as I do from time to time, that the governing bylaws of the ASAA require that a majority of the seats on the Board of Directors be occupied by sleep apnea patients and their advocates and that the board chair always be drawn from among this majority. The information that we gather and circulate, the perspective that we offer and represent to government agencies, health educators, opinion makers, and others, all is laid out with the interests of sleep apnea patients as our primary concern.

One of the best ways—perhaps the best way—for you to say “Thank you” for our work is to enroll as an ASAA member. You can do this by filling in the form on the back page of *Wake-up Call* or by signing up online at www.sleepapnea.org/support/join.html.

I’m eager to hear from you.

—Edward Grandi

Cardiovascular, continued from p. 1



The molecular structure of human endothelin1, a blood vessel constrictor.

Wikimedia Commons

Normally, blood pressure is maintained at an appropriate level by a healthy balance between constricting and dilating mechanisms. Vessel dilation is achieved by substances like nitric oxide, which is produced by the endothelial cells lining the blood vessels. A major constricting force is endothelins, proteins also manufactured by the endothelial cells along the inner surface of blood vessels. When endothelin increases excessively it constricts the blood vessel and raises the pressure.

The exact mechanisms that set off endothelial dysfunction, however, remain unclear, although it appears that sleep apnea can be a contributing factor.

Dr. John Sotos of Palo Alto, CA, a cardiologist who is a member of the ASAA’s board of directors, noticed several years ago that untreated sleep apnea has a particularly undesirable effect on patients suffering from heart failure. Specifically, the negative pressure in the chest cavity created by blocked inhalation forces the heart to work harder just when the treating physician is trying to create circumstances in which the heart can work less. Furthermore, as the caregiver seeks to reduce the patient’s blood pressure (chronic high blood pressure is a recognized contributor to heart failure), sleep apnea drives the blood pressure up—and especially during sleep, when blood pressure normally falls.

Somers notes in a summary of his research activities that his research program is giving “special attention to mechanisms by which sleep apnea may worsen heart failure.

“We are also addressing the potential mechanisms by which changes in neural and vascular function may contribute to the circadian pattern of cardiovascular events,” he added. In other words, in Somers’ view, the time of day at which cardiovascular events both good and bad occur is in itself potentially significant.

Somers is an exceptionally productive researcher. His bibliography runs to hundreds of articles of which he is either principal author or coauthor, 29 articles published in 2010 and 2009 alone. He is currently collaborating in a variety of studies at Mayo, the University of Iowa, the University of Cincinnati, and academic medical centers in Italy, Poland, the Czech Republic, Germany, and Belgium.

Over the course of the last 15 years, most cardiologists have learned to check for sleep apnea when they encounter new heart disease patients, according to Somers. That’s a great change from the pattern of the early 1990s.

In many cases treatment of the sleep apnea with positive airway pressure improves the patient’s cardiovascular problems as well. Sometimes, however, the damage may be irreversible, he said. ■

ASAA mourns Dave Hargett Former chair was noted sleep apnea activist

Dave Hargett, 61, a sleep apnea activist who was chair of the board of the American Sleep Apnea Association from 2002 to 2008, died Aug. 22 in a hospital near his home in Bolingbrook, IL, in Chicago’s western suburbs. He had cancer.

Hargett was diagnosed with severe obstructive sleep apnea in 1994; the disease was successfully treated with CPAP therapy. He soon became active in the Elk Grove, IL, A.W.A.K.E. support group near his home, and went on from that to networking with other A.W.A.K.E. groups in northern Illinois and subsequently nationally.

Patient advocacy became Hargett’s passion. He was a regular at the annual Sleep Meeting of the Associated Professional Sleep Societies from 2003 to 2008. Hargett founded A.P.N.E.A. NET, the Apnea Patient’s News, Education and Awareness Network, and maintained its web site, www.apneanet.org until his death.

The ASAA bylaws reserve the post of chair of the board of directors to a patient or patient advocate in order to emphasize that while the association’s membership includes both apnea patients and their professional caregivers, its policies are ultimately set by patients. In his time as chair, Hargett never hesitated to put forward the patient’s point of view. Building on his experiences in Chicago area A.W.A.K.E. groups, Hargett’s primary focus as chair was on strengthening the A.W.A.K.E. Network, a key arena for patients seeking to take responsibility for their own good health. He was also a regular participant in the Apnea Support Forum.

In addition to his membership on the ASAA board, Hargett was the public member of the board of directors of the Board of Registered Polysomnographic Technologists.

Speaking for the ASAA board, Executive Director Edward Grandi said, “We will miss Dave’s creative input on the operations of the association. We are grateful for his contributions over the years and he will be sorely missed.”

Grandi said he would recommend to the ASAA board that it honor Hargett’s extraordinary enthusiasm by establishing the Dave Hargett Memorial Volunteer Award. The award’s purpose would be to recognize volunteers who, like Dave, bring creative energy to raising awareness about sleep apnea and to helping those facing challenges with therapy through the A.W.A.K.E. Network. ■



Dave Hargett posing with his PAP mask in place.

Central to the support structure of the American Sleep Apnea Association are our corporate members. The group comprises businesses that deal in one way or another with the sleep community, especially those affected by sleep apnea. We have recently separated our corporate members into a three-part honor roll.

Here is that honor roll:

Gold, members who have contributed \$1,000 or more

- American HomePatient
- Apneasure
- Contour Products
- Doctors Community Hospital
- Embla
- eZe Innovations
- Fusion Sleep
- I Hate CPAP
- Instant Diagnostic Systems
- MedGroup
- Nationwide Medical
- Sleep HealthCenters
- SleepCare.com
- SomnoMed
- The Snoring Center

Silver, members who have contributed \$500

- aveoTSEthics Intl.
- CPAP Supplies Plus/Direct
- Itamar
- Midland Transport
- Occupational Sleep Apnea Solutions
- Snoring Isn’t Sexy
- Watermark Medical

Basic, members who have contributed \$150

- Rotech Healthcare
- Sleep Connect

Awake in kitchens



Our friends at Talk About Sleep, www.talkabout-sleep.com, have published a new fund-raising cookbook titled *Pay It Forward*. The proceeds will support their educational work and their distribution of free medical equipment to those in need.

You can order the \$20 book at their web site—just click the picture of the book on the lower left—and learn, among other things, how to prepare “the best lamb curry in the world.” ■

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Address Service Requested

ASK THE DOCTOR

My husband has severe sleep apnea and has been on a CPAP machine for years. When he wakes up, he'll cough constantly and then during his waking hours he continues to cough on an intermittent basis. Is this related to the fact he sleeps with this machine? He gets upset when I mention how much he coughs. A doctor's checkup

has indicated that his lungs are clear. What do you think might be going on?

I have sometimes had patients who experienced coughing at night while using a PAP. With such patients, I look at the humidity the equipment is delivering and how well it is cleaned. In the patient, I check for post-nasal drip and reflux, and I examine other cardiopulmonary findings. How long

has the coughing been an issue? Since the coughing occurs in the daytime as well, I think it unlikely it's related to the PAP itself, but some of the above can be aggravated by PAP or sleep.

Rochelle Goldberg, M.D.

Rochelle Goldberg, M.D., is president and chief medical officer of the American Sleep Apnea Association.

IS YOUR MEMBERSHIP UP TO DATE?

- I'd like to be enrolled as a member of the ASAA, and receive a subscription to Wake-up Call. Enclosed is a check for \$25 (one-year membership).

NAME

ADDRESS

CITY

STATE

ZIP

TELEPHONE

EMAIL

SENDER'S NAME

ADDRESS

CITY

STATE

ZIP

TELEPHONE

EMAIL

Please accept \$ _____ as a contribution in memory/honor of _____.
Send an acknowledgement to the name below.

- I'd like to enroll my friend/family member in the ASAA and subscribe him/her to Wake-up Call. Enclosed is a check for \$25 (one-year membership). Please send a medical-alert as well.
- Bracelet Necklace

NAME

ADDRESS

CITY

STATE

ZIP

TELEPHONE

EMAIL

Mail this form with your check made payable to The American Sleep Apnea Association.
ASAA, 6856 Eastern Ave. NW, Suite 203, Washington, DC 20012

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FALL 2010

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This newsletter provides general medical information about sleep apnea. Individuals with personal health concerns about sleep apnea, or other sleep disorders, should seek advice from a doctor who concentrates in sleep medicine. Wake-Up Call is copyrighted and cannot be reproduced

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