



Second Wind

NEWSLETTER

April-June 2005

PERF, The Pulmonary Education and Research Foundation, is a small but vigorous non-profit foundation. We are dedicated to providing help, and general information for those with chronic respiratory disease through education, research, and information. This publication is one of the ways we do that. The Second Wind is not intended to be used for, nor relied upon, as specific advice in any given case. Prior to initiating or changing any course of treatment based on the information you find here, it is essential that you consult with your physician. We hope you find this newsletter of interest and of help.

PERF BOARD OF DIRECTORS

Richard Casaburi, PhD, MD, President
Alvin Grancell, Vice President
Mary Burns, RN, BS. Executive VP
Jean Hughes, Treasurer
Janos Porszasz, MD, PhD, Webmaster
Alvin Hughes
Barbara Jean Borak
Brian L. Tiep, MD
Peter D. Pettler, Esq.
James Barnett, RRT, RCP
Thomas L. Petty, MD, President Emeritus

We get mail, Heart Attack, The History of COPD by Tom Petty, Mary's Travels, Cruise News, Stop Smoking into Old Age by Tom Petty

The National Heart, Blood and Lung Institute, NHBLI, asked us to share this information with our readers. For more information check out the following government website.

http://www.nhlbi.nih.gov/health/dci/Diseases/HeartAttack/HeartAttack_WhatIs.html

What Is a Heart Attack?

A heart attack occurs when the supply of blood and oxygen to an area of heart muscle is blocked, usually by a clot in a coronary artery. Often, this blockage leads to arrhythmias (irregular heartbeat or rhythm) that cause a severe decrease in the pumping function of the heart and

may bring about sudden death. If the blockage is not treated within a few hours, the affected heart muscle will die and be replaced by scar tissue.

A heart attack is a life-threatening event. Everyone should know the warning signs

of a heart attack and how to get emergency help. Many people suffer permanent damage to their hearts or die because they do not get help immediately.

Each year, more than a million persons in the U.S. have a heart attack and about half (515,000) of them die. About one-half of those who die do so within 1 hour of the start of symptoms and before reaching the hospital.

Emergency personnel can often stop arrhythmias with emergency CPR (cardiopulmonary resuscitation), defibrillation (electrical shock), and prompt advanced cardiac life support procedures. If care is sought soon enough, blood flow in the blocked artery can be restored in time to prevent permanent damage to the heart. Yet, most people do not seek medical care for 2 hours or more after symptoms begin. Many people wait 12 hours or longer.

A heart attack is an emergency. Call 9-1-1 if you think you (or someone else) may be having a heart attack. Prompt treatment of a heart attack can help.

What Are the Signs and Symptoms of a Heart Attack?

The warning signs and symptoms of a heart attack can include:

- **Chest discomfort.** Most heart attacks involve discomfort in the center of the chest that lasts for

more than a few minutes, or goes away and comes back. The discomfort can feel like uncomfortable pressure, squeezing, fullness, or pain. Heart attack pain can sometimes feel like indigestion or heartburn.

- **Discomfort in other areas of the upper body.** Can include pain, discomfort, or numbness in one or both arms, the back, neck, jaw, or stomach.
- **Shortness of breath.** Often comes along with chest discomfort. But it also can occur before chest discomfort.
- **Other symptoms.** May include breaking out in a cold sweat, having nausea and vomiting, or feeling light-headed or dizzy.

Signs and symptoms vary from person to person. In fact, if you have a second heart attack, your symptoms may not be the same as for the first heart attack. Some people have *no* symptoms. This is called a "**silent**" heart attack.

The symptoms of angina can be similar to those of a heart attack. If you have angina and notice a change or a worsening of your symptoms, talk with your doctor right away.

Know the warning signs of a heart attack so you can act fast to get treatment. Many heart attack victims wait 2 hours or more after their symptoms begin before they seek medical help. This delay can result in death or lasting heart damage.

If you think you may be having a heart

attack, or if your angina pain does not go away as usual when you take your angina medicine as directed, call 9-1-1

for help. You can begin to receive life-saving treatment in the ambulance on the way to an emergency room.

The History of COPD

By Dr. Tom Petty

COPD is finally finding its rightful place amongst the diseases that must be solved in our society. Now fourth amongst the killers in the USA, COPD will be the third most common cause of mortality in the world in just a few years. Much credit for this can be given to the tobacco industry that continues, unrelentlessly, to promote addiction, suffering and death around the world, for profit.

I am just finishing writing the fascinating history of COPD for a new journal, *The International Journal of COPD*. In this review, I cite the four centuries of evolving knowledge about COPD that has occurred. Two landmark inventions, the stethoscope by Laennec in France in 1819 and the spirometer by Hutchinson, the Englishman, in 1846 offered new opportunities to begin to discover the basic nature of COPD. Laennec, both a clinician and a pathologist, recognized that COPD was different from asthma, and quite different from tuberculosis. The latter was the most common cause of death in the World, and in the USA, at the turn of the 19th century. TB still ranks as a top killer, worldwide. Laennec was one of the first to recognize that emphysema, which is part of COPD, is a condition where the lungs have lost their elasticity and thus they empty poorly and trap air within the chest. He also realized that there was an accompanying abnormality of the small air passages, that serve the alveoli of the lungs.

"Perhaps both processes conspire to create the abnormality," he wrote. What wisdom, from an early clinician and scientist.

Chronic Bronchitis was known as the "catarrh," a word that can be easily found in old textbooks of medicine and health manuals for the public. Numerous remedies and nostrums were widely promoted to quell the troublesome cough and mucus that plagued patients of antiquity as well as today. Grandmothers would use chicken soup for colds that "settled in the chest." How wise these women were. Scientific studies have shown that chicken soup helps the body's immune system to deal with infections! How fitting a tribute to women on Mother's Day!

Emphysema and chronic bronchitis were not well defined in clinical or scientific terms until the 1960s. Indeed the term COPD, itself, was not used until it was first suggested at an Aspen Emphysema Conference in 1966. Now COPD has become a household word yet not well understood by the public, and alas, many physicians. But things are improving rapidly. New science has defined the basic abnormalities that cause emphysema and chronic airway irritation and inflammation, the chronic bronchitis that is part of the problem. Most patients with COPD have both. Many also have increased irritability of the air passages, that creates bronchial spasm and increased mucus and cough. These

scientific discoveries are creating new strategies for treatment.

COPD is now recognized as a total body or systemic disease. An effect on the heart, muscles of the body, bony skeleton, and even mental processes is part of the COPD process. COPD has an underlying inflammatory condition that affects almost every organ of the body. Patients with COPD often have a genetic component that underlies the processes. One heritable abnormality is the alpha-one deficiency. But COPD still clusters in families beyond the alpha-one problem. I believe that COPD should be considered a heritable disorder, that is precipitated by the environment (personal and general), that worsens with age. Although COPD is irritated if not caused by smoking in 85% of sufferers, 15% have never smoked. Thus we must look further for the genetic causes. Perhaps gene therapy will solve the problem in the future.

For now, we must promote early identification and intervention. The National Lung Health Education Program, launched in 1997 promotes the widespread use of spirometry to find COPD in early and non-symptomatic stages. Here is where smoking cessation, vaccination against influenza and one common cause of pneumonia will do the most good. A consensus recommendation of the NLHEP is to do spirometry in all current or former smokers age 45 or older and in anyone with chronic cough, dyspnea on exertion, excess mucus or wheeze. It is well known that we have 16 million

Americans who have COPD now and many are not receiving any treatment at all! But worse than this is that another 16 million have it and do not even know it. Now is the time to change all of this by promoting simple office spirometry as recommended by the NLHEP and a new global initiative known as the GOLD.

We do have good things to offer patients with all stages of COPD. Smoking cessation is important, indeed critical in all patients, if at all possible. But we must all remember that some patients with COPD simply cannot stop because of the depression and anxiety that nicotine helps control. Switching to nicotine replacement products helps some, but not all, desperately addicted smokers. We must be compassionate and not punitive to those who are hopelessly addicted.

We have a growing number of good bronchodilators, anti-inflammatory drugs, antibiotics and other agents to prescribe to all symptomatic patients today. Long term home oxygen, particularly with light weight systems to allow the patient to wear the oxygen and be active outside of the home, improves both the length and quality of life. Pulmonary rehabilitation is of established value to those who participate in a comprehensive program for COPD. Lung volume surgery helps a select few, as does lung transplantation. But surgery is not the answer in the long term.

We at PERF have just completed a detailed booklet, written for patients that

we are proud to offer not only the readers of Second Wind, but also EVERYONE. You may read and download it from our web site, www.perf2ndwind.com. We hope this will help increase COPD

awareness.

Fraternally,

Dr Tom Petty

When things in your life seem almost too much to handle, when 24 hours in a day are not enough, remember the mayonnaise jar...and the 2 cups of coffee...

A professor stood before his philosophy class and had some items in front of him. When the class began, wordlessly, he picked up a very large and empty mayonnaise jar and proceeded to fill it with golf balls. He then asked the students if the jar was full. They agreed that it was.

The professor then picked up a box of pebbles and poured them into the jar. He shook the jar lightly. The pebbles rolled into the open areas between the golf balls. He again asked the students if the jar was full. They agreed it was.

The professor next picked up a box of sand and poured it into the jar. Of course, the sand filled up everything else. He asked once more if the jar was full. The students responded with a unanimous "yes." The professor then produced two cups of coffee from under the table and poured the entire contents into the jar, effectively filling the empty space between the sand. The students laughed.

"Now," said the professor, as the laughter

subsided, "I want you to recognize that this jar represents your life. The golf balls are the important things - your God, family, your children, your health, your friends, and your favorite passions - things that if everything else was lost and only they remained, your life would still be full. The pebbles are the other things that matter like your job, your house and your car. The sand is everything else - the small stuff."

"If you put the sand into the jar first," he continued, "there is no room for the pebbles or the golf balls. The same goes for life. If you spend all your time and energy on the small stuff, you will never have room for the things that are important to you. Pay attention to the things that are critical to your happiness. Play with your children. Take time to get medical checkups. Take your partner out to dinner. Play another 18. There will always be time to clean the house and fix the disposal. Take care of the golf balls first, the things that really matter. Set your priorities. The rest is just sand."

One of the students raised her hand and inquired what the coffee represented. The professor smiled. "I'm glad you asked. It just goes to show you that no matter how full your life may seem, there's always Room for a couple of cups of coffee with a friend."

FDA published its final rule about a week ago, and it extended the phase-out period for chlorofluorocarbon (CFC)-containing metered-dose inhalers (MDI's) until the end of 2008. This will result in significant savings to individuals and health care providers for poor patients. On the other hand, it extends the time in which chemicals that deplete our ozone layer will be used.

Memorial donations were made by Susan Hesser in memory of Dorothy Hall, Mary Burns in memory of Richard Davidson, James Lynch in memory of Beverly Ann Cline.

Kevin and Judith Hettich made a donation in honor of Mary Burns for the Chair.

The spring and summer months are ideal for traveling, and our own Mary Burns is traveling to Norway and Sweden. Mary will be visiting Audhild Hjalmarsen, MD above the Arctic Circle in Tromso, Norway and Margareta Emtner, PhD in Uppsala, Sweden. Mary will also be speaking to physicians and respiratory therapists in Trondheim, Norway.

Mary promises a long letter in July with details of her interesting journey.

For travel next year, Jim Barnett of Mission Hospital in Mission Viejo is sponsoring an Alaskan Cruise on Princess Cruise Line's, Regal Princess. The cruise will leave from San Francisco on June 15, 2006. The ports of call will be Juneau, Skagway, Tracy Arm and Ketchikan Alaska. The final port of call will be Victoria, Canada and the cruise will end at San Francisco on June 25, 2006. Prices range from \$1449 to \$2524 per person, and bus transportation to and from San Francisco will be included at an additional cost. For additional information please contact Jim Barnett at 949-365-2106.



The Snowdrift
Pulmonary
Conference
899 Logan Street, Suite
203
Denver, CO 80203-3154
Phone: 303 996-0868
Shared FAX:
303 996-0870
E-mail: tipdoc@aol.com

Senior Moderator

Thomas L. Petty, M.D.
Professor of Medicine
University of Colorado
School of Medicine
Denver, Colorado

Dear Friends:

April 2005

Stop Smoking Into Old Age

Approximately 9.3% of people older than 65 continue to smoke cigarettes. About 300,000 people age 65 and older die each year of smoking related diseases. A recent article in the AMA News (February 21) reports that an estimated 57% would like to quit. But only about 10% of older Americans actually quit each year. How can we improve this?

Some time ago I wrote an editorial entitled, "It's Never Too Late to Stop Smoking, but How Old Are Your Lungs?" The point I was making is that smoking causes premature losses of lung function in susceptible people. Their lungs actually "age" faster than they do. Why is this important at old age? The answer is easy. We want our lungs to last a lifetime! Healthy people at age 65 have about 20 years ahead, if they can prevent premature aging of the lungs, leading to emphysema/COPD, and other smoking related cancers.

For assistance in stopping, health care workers should always ask about current smoking, assist the smoker in quitting and arrange for consultation in difficult cases. Picking a quit date, and trying to modify the habits that remind people to light up is a good strategy. Many nicotine replacement products are available over the counter or by prescription to reduce the nicotine craving on stopping. Other prescription drugs such as Zyban (bupropion) used alone or with nicotine replacement can help the most addicted smokers. Failure to stop immediately should be followed by another try. It may take up to seven attempts to really succeed.

Get your lung function tested by spirometry. "Test Your Lungs, Know Your Numbers" is the motto of the National Lung Health Education Program (NLHEP). NLHEP provides educational materials about COPD and is a service of your respiratory therapy department and your physician.

By stopping smoking NOW, you can approach old age with new vigor and health. Don't smoke out old age! Be there by not smoking!

I'll be in touch next month.

Your friend,

Thomas L. Petty, M.D.
Professor of Medicine
University of Colorado Health Science Center
President, Snowdrift Pulmonary Conference