

April-May 2001

PERF, The Pulmonary Education and Research Foundation, is a small but vigorous non-profit foundation. We are dedicated to providing help for those with chronic respiratory disease through education, research, and information. We hope this newsletter is worthy of our efforts.

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Key Words: Rally for Research, Sustaining Members of Chair, Alzheimer's disease

id you think that your April newsletter got lost in the mail? Sorry about that, folks, but your editor has been down with a nasty flu for several weeks. This has resulted in a delay of deadlines and postponement of plans which no amount of chicken soup seemed to help. Did I get the flu vaccine? You bet. Will I get it again next year? I sure will. The vaccine doesn't protect you against every virus out there, and doesn't even guarantee 100% immunity against the designer bug of the year, but it is still more than worth the discomfort of that little injection. So, with that in mind, may I sincerely wish that all of you, our readers, are free of Spring bugs and adverse reactions to the plentitude of pollens floating around those Spring flowers! Bless you and Gesundheit!

Are you ready Rally for to Research? This all day fund raiser for the Alvin Grancell-Mary Burns Chair in Rehabilitative Sciences will take place June 22nd at **Long Beach** Memorial Medical Center. promises to be *the* day of the decade for those with pulmonary disease. This is your chance to meet and greet the some of the biggest names in the field. Dr. Tom Petty, Dr. Rich Casaburi, Dr. Brian Tiep, Dr. Paul Selecky and Dr Andy **Ries** will travel to Long Beach to join hosting pulmonologists Drs. Jeff Riker and George Huthsteiner II. The admission price of \$15 includes lunch, "The Long Beach 500", door prizes, entertainment, "Ask the vendor displays as well as the latest updates on what is new in the field by these internationally renowned experts.

Are you are a **vendor** interested in displaying your product to the 350 participants expected at this event? Are you are a health professional interested in having your group join the others from Southern California who planning to attend? Or are you just interested in more information? If so call (310) 539-8390 or (877) **280-2777 for details.** Because of our famous speakers, this is sure to be a capacity crowd. Warning! Fire laws strictly limit the number of people that can be accommodated. Get your reservations in early, to avoid missing this special Rally.

Remember, that one of the purposes of this event is to raise money for the Chair. The physicians involved will donate their honorariums. The \$500 participation fee for vendors will also go to this worthy cause.

Would you like to do more? Dr. Tom Petty invites you to join him by also donating \$500 in your name, or as a memorial, in support of this

project. Such tax deductible donations will be honored perpetuity by a plaque, inscribed with the names of the donors, in the Rehabilitation Clinical Trials Center at Harbor-UCLA. Tom Petty, Rich Casaburi, Mary Burns and Jeanne Rife have already sent in their checks for this cause, your cause, in which they believe so strongly. Won't you join them, and support future research into the rehabilitation of those with pulmonary disease?

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A very generous bequest from the estate of *Margaret Gray* has been made in memory of her husband, Herman. This will be dedicated to the Chair listing the <u>Herman Gray Memorial</u> a sustaining member of the Chair in Rehabilitative Sciences.

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Memorial donations for Mary Nichols Lynch were received from Al Baisi, George & Lisa Williams, John & Barbara Schwartz, Edith Sheppard, Patty Kelm, Mr.& Mrs. Gullickson. Mr. Ŀ Wm. Mrs.DeCoster, Mr. & Mrs. Farley, Steve & Julie Lynch, Betty Lynskey, Nancy &Bert Maiers. Helen & Thomas Michael Pratt, Simonet, Mark Dillon, Paul & Annette Rosen, Pat Kennedy, Anne Eastman, Archie Gingold, Billy's on Grand, Institute for Learning in Retirement, Inc., John Erdall, Karl & Bobbie Kaufmann, Roger Forman, **Jeff** Bangs, Steve Woodrich, Jean

Trudeau, Emily & Gedney Tuttle, Thomas Dillon, Fritz & Arlene Rohkohl, Andrew Garoogian, Mary Pratt, and James & Emily Seesel, Jr. in addition to a donation from Mary's husband, Judge James Lynch. These donations will be kept in perpetuity by a sustaining membership for the Mary Nichols Lynch Memorial for the Chair in Rehabilitative Sciences.

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Many of you have read and reread *The Chronic Bronchitis & Emphysema Handbook* by Drs. Francois and Sheila Haas. Well, there is good news! The updated version of this book has just come out. The 318 pages are crammed with information and are a real bargain at about \$15.95 For more information John Wiley & Sons, Inc. using ISBN#047123995X

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Carolyn asks, "How long does it take to return to your normal oxygen rate after you take off your supplemental oxygen?

Good question. Many labs feel that it takes 20 minutes to be completely sure that the effects of supplemental O2 are gone. Most of the effects are gone very much sooner, probably in about 2-3 minutes for the majority of the change in

saturation to take place.

Alzheimer's and Memory Loss

Do you worry about getting old and senile? Well, there is no such thing as "Just getting senile". Forgetfulness, however, may accompany normal aging, especially

- 1. difficulty recalling names
- 2. lessened ability to concentrate
- 3. difficulty remembering where you left things

It is only when memory loss and confusion begin to interfere with daily living that this becomes abnormal. Forgetting where you put the keys is normal. Putting them in the microwave to cook them isn't.

Senile dementia blends in with Alzheimer's and it is only on a post mortem autopsy that a diagnosis becomes definite. So, who needs a definite diagnosis!

Alzheimer's disease was first noted 1906 by a German neuropathologist, Dr. Alois Alzheimer. Did you know that over 20 million people around the world, 4 million people in the United States alone, are estimated to be suffering from By the year Alzheimer's today? threefold increase 2050 a expected. Phew! The grim statistics for the numbers of those now afflicted are

- 10% of those who are age 65
- 30% of those who are age 75

• 50% of those who age 85 or older

Examples of famous people so afflicted are Ronald Reagan, now age 90; Rita Haywood, at age 68; Barry Goldwater, at age 85; Burgess Merredith at age 89 as well as Sugar Ray Robinson, Erick Copeland and the list goes on and on. Death may not necessarily come directly from the disease, but indirectly, because of secondary problems caused by decreased activity.

Dementia is the loss of mental abilities involving memory, reasoning, judgment and other areas of thinking, which is severe enough to interfere with work, normal social activities and other routines associated with daily life. The *key* is that it is *progressive*.

The causes of dementia are

- Alzheimer's
- Senility, a form of Alzheimer's but is usually considered to be a milder degree of that diagnosis.
- Strokes: usually many small ones affecting different areas of the brain. This can be ruled out with an MRI scan.
- Reaction to medications: be especially careful with over the counter medications and homeopathic medications which contain uncontrolled dosages and poorly researched ingredients.

- Prescription medication can also have an effect on memory.
 Digoxin needs to be closely monitored (and usually is).
 Tagamet in high doses can cause memory loss. Inderal can cause depression. Tranquilizers of all kinds can be at fault.
- Mixes of many different types of medications are a potential problem. Eliminate as many medications as your physician feels you can. Older bodies often dispose of medications at a slower rate and these medications have an increased effect of the brain.
- Substance abuse.
- Vitamin B deficiencies, especially Vitamin B12. This can be detected with a blood test and easily remedied with supplements.
- Hematoma, (blood clot) on the brain, occurring after a fall with a blow to the head, especially if on aspirin or Coumadin.
- Tumor of the brain
- Thyroid deficiency: again, easily detected with the blood test TSH.
- Depression: difficult to diagnose but easy to treat. For instance, when asked for the date the patient with Alzheimer's typically guesses the wrong date. The depressed patient will say "I don't know", being unable to make the effort to answer.

- Normal Pressure Hydrocephalus: this is usually caused by a head injury due to a previous fall. In addition to memory loss and confusion, a diagnostic symptom is an ataxic gait (difficulty walking). Surgery can relieve the pressure in the brain and the symptoms.
- Post pump syndrome: about 10% of patients put on a heart-lung bypass system develop some dementia post operatively due to tiny blood clots that travel to the brain.
- Low oxygen levels can cause problems with memory and slow thinking. Supplemental oxygen reverses this deficit.

The physician doing a physical probably will give a simple mental status questionnaire, by asking such questions as

- 1. What year is it now?
- 2. What month is it now?
- 3. What time is it (within one hour)?
- 4. Count backwards 20 to 1.
- 5. Say the months in reverse order.

Whew! Feel better now that you have successfully passed that quiz? Let's go on. Your physician will also want:

• A family history of other members with dementia, especially of those having symptoms before the age of 50.

There is now genetic testing of chromosomes that can determine if there is a genetic relationship. The possibility of genetic disease increases with one family member who is affected and is higher with two. Remember, even if genetic testing is positive there is usually only a 50% chance (or often less) that you will be affected.

- Input from family members.
- Copies of **blood tests**.
- A history of all **medications** taken.
- Sometimes MRI scans of the brain or even spinal taps are among the things that can be used to diagnose, or to rule out, other problems.
- Remember, dozens of reversible conditions can mimic dementia. It is essential to get a proper diagnosis and to treat symptoms promptly, when you or a loved one starts experiencing serious mental deterioration.

Early diagnosis of the cause of dementia with PET (positron emission tomography) scanning is now being researched at UCLA's Brain Mapping Center. This new imaging research adds weight to a growing body of medical evidence strongly suggesting that Alzheimer's disease begins with subtle neuronal decades changes before any

observable symptoms of mental decline. This suggests that treatments, when they become available, can begin *before* the brain is severely affected.

PATHOLOGY OF ALZHEIMER'S DISEASE (This may be more than you want to know!)

- In Alzheimer's disease there are outside sticky plaques the and stringy neurons tangles within them. No one, as yet, definitely knows why but research is ongoing.
- Beta Amyloid: a protein that forms on the outside of brain cells. This can form plaques. Plaques can grow so large that they cause an inflammatory reaction. Inhibitors that block production are being tested.
- Neuralfibrillary plaques: small pieces of protein which support the nerve cells and act as a circulatory system break down Again, we are hoping to develop drugs to prevent this.
- The mutant APP gene on Chromosome 21 accounts for less than 1% of Alzheimer's with onset ranges from age 28 to 50. It is a dominant gene.
- Presenilin-1 Chromosome 14 accounts for perhaps 4% of Alzheimer's with onset in the 40s to 50s. This is also dominant, meaning if inherited from one parent it will cause the disease.

- APOE4, Chromosome 19 is found in 65% of Alzheimer's patients. However, it is not as damaging as the early-onset mutations, and many people who inherit it will *never* develop the disease, <u>even</u> in their 90s.
- It is believed that there are other Alzheimer susceptibility genes not yet discovered.
- Cerebral atrophy: with age *all* brains become smaller.

(We warned you that this was probably more than you wanted to know.)

Treatment

- Tacrine HCL (Cognex)
- Donepezil HCL (Aricept) This is probably the better medication, though only slightly so, and only in early stages. It is of no value in moderate or advanced disease.
- Vitamin E, 400 to 800 mg. daily
- Zyprexia for paranoia
- Treat hypoxia. 20% of your oxygen intake is used by the brain so, if you have low oxygen levels, it is *essential* to use your oxygen as prescribed. This isn't news to you since we have been preaching this, month after month in the newsletter.
- Treat depression
- Treat hypothyroidism
- Treat Vitamin B12 deficiency
- Vaccinations: none available now but they may be available in the future.

Caretakers

It is *essential* that caretakers also take care of *themselves*! They need time off.

Here are the phone numbers of two of the most prominent organizations; there are many others.

Alzheimer's Association 1-800-272-3900

AD Education and Referral Center (NIH) 1-800-438-4380

Preventative measures include

- good nutrition, including a low fat diet with lots of fruits and vegetables (have you heard that one before?)
- no smoking. (And you've heard that one a time or two also.)
- minimal amounts of alcohol. An excessive amount of hard liquor is especially apt to cause brain damage.
- Remain **physically** and mentally active. Challenge the brain by also remaining socially active. Play challenging games puzzles. Higher intelligence and education higher seems to decrease the incidence of Alzheimer's. This may, however, be due to a stimulating environment and a good diet.

The good news is that brain capacity can increase, even in older age, if you continue to exercise it and to use it. The adult brain *can* improve! Research breakthroughs with medications and vaccinations are expected with in the next 5

years, so keep watching for the latest medical announcements.

This information was obtained from a lecture by Robert Faran, MD as well as from several articles.

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Thanks to Betty Hoffmeier, Teijin Ltd., Charles Hoffmeier, and Shirley and William Grindrod for their contributions to PERF.

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Some random thoughts:

- Birthdays are good for you; the more you have, the longer you live.
- How long a minute is depends on what side of the bathroom door you're on.
- Ever notice that the people who are late are often much jollier than the people who have to wait for them?
- If ignorance is bliss, why aren't more people happy?
- You may be only one person in the world, but you may also be the world to one person.
- Some mistakes are too much fun to only make once.
- Don't cry because it's over; smile because it happened.
- A truly happy person is one who can enjoy the scenery on a detour.
- Happiness comes through doors you didn't even know you left open.

Remember to Rally for Research!!!