Lungevity

Seton Medical Center

Member of Daughters of Charity Health System

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A bi-monthly publication by the Department of Pulmonary Rehabilitation

We will be starting a very important study this month to begin to look at the impact of pulmonary rehabilitation on persons with interstitial lung disease. This study will include Seton, UCSF, John Muir in Concord, Duke in North Carolina, Yale in Connecticut, Inova in Virginia and the University of British Columbia. The study will be coordinated by Hal Collard MD and Chris Ryerson MD from UCSF and Chris Garvey NP from Seton. The study will look at short and long term effects of Pulmonary Rehabilitation on persons with interstitial lung diseases. For more information, call Chris Garvey, NP at 650-991-6776 or email chrisgarvey@dochs.org.

Happy St. Patrick's Day and Go Giants!

Chris

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UPCOMING CLASSES

Update on Oxygen Systems

By Joe Blum from Invacare

The update will include information on portable oxygen concentrators and home fill systems.

Thursday, March 18 at 3:30 pm at Seton Pulmonary Rehabilitation

For more information call (650)991-6776.

Could Your COPD be Hereditary?

By Lindsay Megenhardt, Patient Advocate, Centric Health Resources.

Thursday, April 22 at 3:30 pm at Seton Pulmonary Rehabilitation

For more information call (650)991-6776.

Alpha-1 antitrypsin deficiency is a hereditary condition that can result in serious lung disease. Testing only takes a few minutes and involves a finger stick to obtain a few drops of blood. Come for a free screening and learn more.

What is New for Pulmonary Fibrosis and Interstitial Lung Disease?

Those impacted by pulmonary fibrosis and interstitial lung diseases such as scleroderma, sarcoidosis, hypersensitivity pneumonitis, etc have few effective options for treatment. Seton is participating in a new international registry that will look at the impact of Pulmonary Rehabilitation on these disorders. To qualify, you should not have participated in Pulmonary Rehabilitation previously. For more information call (650)991-6776 or email chrisgarvey@dochs.org.

Resources for Pulmonary Fibrosis

UCSF Interstitial Lung Disease Program presents Living Well with Interstitial Lung Disease - *A free support group for patients, families, and caregivers affected by ILD*

All of these conditions are characterized by some degree of inflammation and/or fibrosis of the lung tissue. People with these conditions experience similar symptoms and challenges. Our group is open to anyone affected by interstitial lung disease. We meet on the second Tuesday of every month, from 1-3 pm. If you are interested in becoming a member of our lively group, please contact Sally McLaughlin, RN, MSN at 415-353-2577, or email Jane.Berkeley@ucsf.edu for further information.

Other pulmonary fibrosis resources:

Coalition for Pulmonary Fibrosis
www.coalitionforpf.org
or call 1-888-222-8541.

Pulmonary Fibrosis Foundation
www.pulmonaryfibrosis.org
or call 1-312-587-9272.

The critical element of safe and effective monitoring with oximetry is that it needs to be done in collaboration with your physician. If you work with a pulmonary rehabilitation team and/or medical equipment provider, they also need to be involved. Your medical team can advise you on appropriate levels of oxygen during rest, exercise and sleep.

Pulse Oximetry
What, Why, When, How, Where and Who?

Pulse oximetry is a non-invasive method of monitoring oxygen saturation of hemoglobin in the blood. Oximetry uses a sensor usually placed on the fingertip that shines light containing red and infrared wavelengths though pulsating tissue. The device monitors arterial oxygen levels to provide the percent of hemoglobin bound with oxygen. Hemoglobin transports oxygen from the lungs to tissue for nourishment and survival.

Pulse oximetry became commercially available in 1981. Technology has allowed these large, costly monitors to be available as very small, affordable monitoring devices for health care settings and for home use.

Oxygen saturation is solely a measure of tissue oxygen levels and does not include all the information about ventilation provided by a blood gas sample taken from arterial blood including blood pH (acidity or alkalinity), carbon dioxide (which may be elevated in some with COPD), bicarbonate (the kidney's role in controlling pH). etc. In severe anemia, the blood will carry less total oxygen, despite the hemoglobin being well saturated with oxygen.

Falsely low readings may be caused by lack of blood flow due to cold fingers, constricted blood vessels, poor circulation, disorders that alter or damage tissue, dark nail polish, excessive movement, poor probe placement or very low oxygen saturation. Manufacturers should guarantee accuracy in a range of + /- 2% down to 80% *when conditions are optimum*. To promote accuracy, the pulse rate should be the same as the person's heart rate. To further promote accurate readings, keep your fingers warm and hold your fingers still during monitoring. Bring your oximeter into rehabilitation class to compare its reading to larger machines.

The basis for personal use of an oximeter for a person with lung disease is to monitor oxygen saturation to permit safe exercise and to determine when oxygen saturation is excessively low. Normal oxygen saturation levels range from 95-99%, although in lung disease, levels may be lower. Most guidelines recommend maintaining an oxygen saturation level of 90% or above with rest, sleep and exercise. Medicare usually covers supplemental oxygen only when the oxygen saturation falls below 88%.

The Nonin Oxyx is available from AeroMedixRx.com or at 1-866-800-0422 and retails for $249.95 with same day shipping, 2 year warranty.

Don't Like How your Nasal Cannula Look or Feel?

Try Oxyview eyeglasses that contain oxygen tubing as part of the glass frames.
See oxyview.com or call 1-877-699-8439.

COPD and Depression

A recent study published in the February CHEST studied a large research data base to determine depression rates in persons with COPD. In the database of 35,722 persons with COPD, 23% had a previous history of depression, compared to 16% of those without COPD. Two basic questions that are used to screen for depression include (from PRIME-MD):

In the past month, have you felt bothered a lot by:

Little interest or pleasure in doing things?
Feeling down, depressed or hopeless?

If you answer yes to either of these questions, or feel that mood, depression or anxiety is uncomfortable or common, let you physician know. Effective treatment is often available, including medication, counseling and strategies that include Pulmonary Rehabilitation.

Air Travel

Before planning air travel, check with your physician to determine if you need oxygen and what flow rate will be required. If you need oxygen for air travel, inform airlines when making travel reservations. Tell them if you plan to bring a portable oxygen concentrator or POC onboard. Before you travel, find out what the airlines requirements are. If you are going to use a POC, be sure you know how to use it and problem solve any malfunctions during travel. Also, be careful to bring 30% more battery time than your flight requires for unplanned delays, etc. The National Home Oxygen Patients Association www.homeoxygen.org has helpful information on POCs and airline regulations.

Got Exercise?

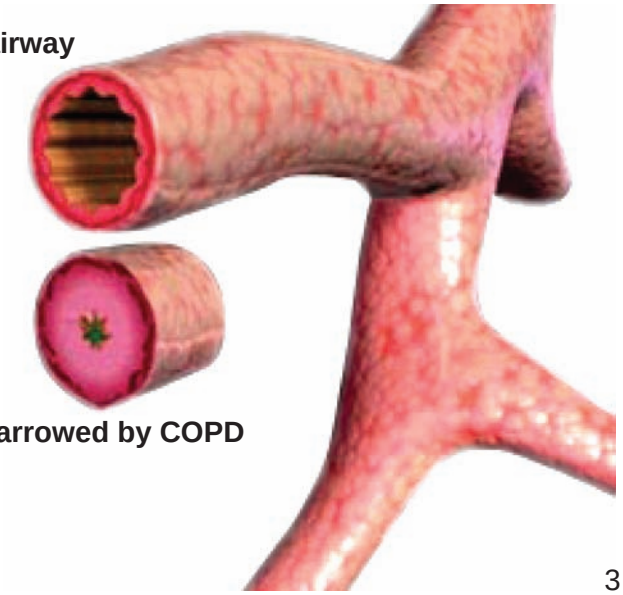
In a study published in the January 25 issue of the Archives of Internal Medicine, older women who exercise with strength training for 1-2 hours per week have improved mental function a year later, with a 10-12% improvement in the ability to plan and execute tasks. There was also improvement in 'executive function' or the ability to make decisions, resolve conflicts and to focus without being distracted. For more information about strength training contact Chris Garvey by calling (650)991-6776.

Update on Spiriva (Tiotropium)

Spiriva is now approved to reduce COPD exacerbations or serious flares of respiratory symptoms in addition to treating bronchospasm or tightening of the airway muscles which leads to shortness of breath.

An article published in the January 2010 issue of CHEST by Bart Celli, Donald Taskin and colleagues looked at thirty well designed studies involving Spiriva and found that Spiriva was associated with lower risk of all causes of death including death from cardiovascular disease when compared to placebo.

normal airway



airway narrowed by COPD

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The Asthma and Allergy Friendly Certification Program **has certified 'Endust Free Dusting and Cleaning Spray' as 'asthma and allergy friendly' and as its first non-disinfecting hard surface cleaning product.**

Does Cold Air Stop You Cold? **For persons sensitive to cold air, consider Breath Warmers, a polar fleece, adjustable product worn over the mouth and nose to warm airways. For more information, see breathwarmers.com or call 1-810-653-8006.**

Prescription Assistance **may be available from Partnership for Prescription Assistance at pparx.org or 1-888-477-2669. For Medicare or other drug prescription coverage, contact Together RX Program at togetherrxaccess.com or 1-800-444-4106.**

Calculating Oxygen Usage for IRS Purposes

The cost of electricity used to operate your oxygen concentrator may be a medical deduction for tax purposes. Calculate the cost of the electricity by using the following formula and discuss deductions with the person who prepares your taxes.

1. Calculate Watts. The label on the concentrator will state the number of volts and amps the concentrator uses (often 115 volts at 4 Amps). Multiply the two numbers to get the watts or go online to *portableoxygen.org/tables.html* for a list of concentrators and wattage.

2. Calculate the number of kilowatt (KW) hours per year. This example uses 460 watts: 460 W x .001 KW/W =.46 KW, 46 KW x 24 hours/day x 365 days/year = 4,029.6 KWH/year

3. Call your electric company to determine the cost of KWH.
Multiply kilowatt-hours per year (KWH/Y) by the cost per KWH for electricity. Example: 4,029.6 KWH/Y x cost per KWH = amount that may be deductible. Calculate for 24 hours per day use if you use the concentrator round the clock year round. To track time used (if you use the concentrator now and then) write down the number of hours shown on the concentrator's counter at the beginning and end of the year. The difference is the number of hours the concentrator was on.

LUNGEVITY is published bi-monthly by the Department of Pulmonary Rehabilitation, sponsored by Seton Medical Center. Please note the advice in this newsletter does not replace your physician's recommendations.

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