

INCREASING AWARENESS OF LUNG DISEASE

by James Stegmaier, RRT-NPS, RPFT, CCM



Advances in medicine have steadily produced a decrease in the mortality rates for heart disease, cerebrovascular accidents and cancer, the three leading causes of death. Despite these advances the death rate for chronic obstructive pulmonary disease (COPD), the fourth leading cause of death in the United States continues to increase. COPD is the only disease in the top ten causes of death to have an increasing mortality rate. The incidence of COPD has increased approximately one hundred 63% since 1975. There are approximately sixteen million Americans living with COPD in 2006 with an annual estimated cost between twenty four and thirty billion dollars or \$35 million per day in direct and indirect costs.

Cigarette smoking is responsible for causing up to ninety percent of COPD cases in the United States with approximately one out of every four U.S. adults smoking. Smoking rates declined between 1966 and 1990 but since 1990 the rate of smoking has remained constant. By nature COPD is a slow progressive disease with a large percentage of patients not aware that they have the disease until there is a fifty percent or more decline in lung function. COPD in its early stages cannot be diagnosed with a chest x-ray or by physical examination by a clinician.

COPD is not well understood by the general public and experts theorize that this may be due to confusion caused by the many names lung disease is known by other than COPD including asthma, chronic bronchitis and emphysema. Many mistake the gradually increasing signs and symptoms of lung disease with the natural aging process. These signs and symptoms include persistent cough, shortness of breath, increased sputum production, decline in quality of life and fatigue.

Research has shown that to decrease the morbidity and mortality rates for COPD earlier detection and treatment is required. Education of health care providers and the general public is critical to increase earlier detection and monitoring of lung disease. Public awareness campaigns have been successful in educating Americans on such topics as high blood pressure, cholesterol levels and early cancer detection. There is a movement by the National Lung Health Education Program (NLHEP) called "Know your numbers" which has the goals of significantly increasing the number of spirometry performed in the primary care setting and improving the patient's knowledge of COPD early on.

Spirometry has become easier to perform in the office setting based upon advances in technology. When quality control is practiced including the use of appropriate repeatability of the data, the information obtained can be highly accurate. Patients who are at risk for COPD can be screened and lung disease can be detected long before the patient has any signs of symptoms of COPD. Patients at risk, smokers and former smokers should have their lung function measured at regular intervals even if initial spirometry results are normal. Early detection is critical so that intervention and life style modifications can be made as necessary to decrease symptoms, exacerbations, hospitalizations and slow the decline in the patient's lung function. NLHEP recommends regular spirometry testing for smokers and former smokers over the

Focus
Booth 824

Join America's Home Healthcare Leader!

Apria Healthcare is the nation's leading provider of integrated home healthcare products and clinical services. We provide and manage a comprehensive range of homecare services including oxygen and respiratory services, home infusion therapy, home medical equipment and home respiratory medications through the Apria Pharmacy Network (APN).

With annual revenues in excess of \$1.5 billion and over 10,000 employees at 500+ operating sites, Apria provides care and support to more than 1.5 million patients in all 50 states. We currently offer this exceptional opportunity in our **LAKE FOREST, CA (Orange County)** corporate headquarters:

National Director of Respiratory Services

- Optimize RT productivity
- Manage Policies and Procedures
- Coordinate Clinical Program Development
- Ensure Clinical Regulatory Compliance
- Education/Staff Development
- Support National Managed Care Accounts

Requires a Bachelor's degree or equivalent; NBRC certification; 8 years recent related RT experience, preferably in homecare; proven managerial skills; and exceptional interpersonal and communication skills.

Please submit your resume with salary history to:

**Apria Healthcare, Professional Staffing,
26220 Enterprise Court, Lake Forest,
CA 92630-8400. FAX: (949) 639-6258.
E-mail: Diane_Cottrell@Apria.com.**

Visit our website at
www.Apria.com.
EOE m/f/d/v.



APRIA HEALTHCARE

CIRCLE READER ACTION CARD # 18

age of forty five, persistent coughs, wheezing, shortness of breath or any regular occupational exposure to smoke or lung irritants.

The NLHEP program goal would include increasing the public's recognition of chronic lung disease. The at risk patient with proper knowledge would have the awareness to discuss the need for routine pulmonary function testing if the subject is not raised by their primary care physician.

Raising the awareness of regular pulmonary function testing for at risk patients requires the aid of all respiratory care practitioners. Regardless of where the respiratory care professional engages in the profession they can make a difference in providing information about COPD to the public. Information can be distributed to patient diagnosed or at risk for COPD in acute care settings, outpatient settings and home care. Information on obtaining brochures and posters for distribution to patients and other health care professionals can be found at the NLHEP website. (www.NLHEP.org) The role of the respiratory therapist has also been identified as a health care provider who has the ability to provide information and training on proper pulmonary function testing administration to other health care professionals involved in the care and treatment of the COPD patient.

Smoking cessation programs go hand in hand with spirometry monitoring. Since smoking produces the majority of COPD patients, once an at risk patient is identified the respiratory care professional must have the necessary information available to offer assistance in quitting smoking. Research studies have shown that eight out of ten smokers have attempted to quit smoking at least once and many will require multiple attempts to ultimately be smoke free. The patient needs to be provided with the motivation and support necessary to be successful. More intensive smoking cessation programs have been shown to provide better opportunities to remain smoke free in the future. Patients should be urged to discuss the usage of medications to improve their chances of success if the patient smokes more than ten cigarettes per day or if they have been unsuccessful in quitting smoking on prior occasions with their physician.

With the morbidity and mortality rates for COPD rising, it is the responsibility of all respiratory care professionals to get involved in improves earlier detection of the lung disease and lifestyle modifications necessary to halt the decline of their lung function. By all respiratory care professionals working together the public's awareness of COPD can be raised and we can begin to reverse the trends and begin to lower the morbidity and mortality rates for COPD in the near future.



JOB TIP: BE DECISIVE

There's still time to register on site at the 6th annual FOCUS Conference April 20-22, 2006 Opryland Hotel - Nashville.

The Role of Nasal Airway... Continued from page 18

In some patients with septal deviation, the turbinates may have compensatory hypertrophy, or enlargement, on the side away from the deviation. In these cases, the patient may experience significant airflow resistance that is chronic or when nasal cycling results in turbinate engorgement on that side.

Rhinitis, or enlargement of the turbinates, is a reaction to the release of Histamine. Rhinitis may be acute or chronic. Another way to describe it may be as either seasonal or perennial. Seasonal rhinitis is commonly caused by pollen. Perennial or chronic rhinitis may be caused by one or several factors, including dust mites, mold and animal dander. Chronic rhinitis may also be a reaction to fumes, smoke, and temperature. Considering the prevalence of dust mites in mattresses, pillows and bedcovering and the relatively common practice of allowing pets to sleep on the bed, it is not surprising that the bedroom is a common location for rhinitis to occur. Supine sleeping posture may also cause turbinate engorgement. Turbinates are reactive to airflow, so that the increased flow associated with CPAP may be the trigger to enlargement. Rhinitis treatment should address the causes. If there is an allergic component, removal or minimizing the offending agent will help. Medications, including steroids may be indicated. Heated humidification has been shown to be effective in treating a turbinate reaction to increased flow of dry air and has become a common addition to a CPAP prescription.

Enlarged turbinates may be managed medically with antihistamines, decongestants or corticosteroids. Surgical treatment is either by excision, or more recently, radiofrequency (RF) ablation, or with a microdebrider. RF ablation, used in prostate enlargement, has been used in sleep-disordered breathing to reduce the size and stiffen the palate or reduce the size of the tongue. A microdebrider is a small tool that can be used to reduce the turbinates. Treatment by either RF or microdebrider is typically an office procedure with minimal patient discomfort.

Nasal polyps may also cause difficulty with the acceptance and tolerance of nasal CPAP. These are soft, jelly-like overgrowths of the lining of the sinuses. They are the end result of varying disease processes. Most are benign, but some may cause chronic inflammation of the nasal cavity or protrude into the nasal cavity. Conditions associated with multiple polyps include: Bronchial asthma, Cystic Fibrosis (CF), Allergic rhinitis, Chronic rhinosinusitis and Allergic reaction to aspirin.

The prevalence in children is 0.1% (6% in CF). The prevalence in adults is 1-4% overall. Polyp management includes surgical removal, steroids and elimination of a source of allergy.

In attempting to treat Obstructive Sleep Disordered Breathing with Nasal CPAP, it is important to consider that nasal airway anatomy and physiology may impede titration and may impair acceptance and usage. Effective treatment of nasal defects or the physiologic response to CPAP may increase acceptance and usage and may decrease the pressure requirement.

When Michael came to the Sleep Center to return his CPAP machine, his doctor convinced him to undergo a more complete upper airway evaluation. After the evaluation and subsequent treatment, Michael found that the use of CPAP was much easier and he no longer removed his mask in his sleep. Happily, he awoke in the morning to find his wife, not his mask at his side.