

B***better*** Breathing

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COPD and Bronchiectasis

Bronchiectasis and chronic obstructive pulmonary disorder (COPD): synonyms for the same condition? Not quite. The American Thoracic Society defines COPD as “a group of lung conditions that make it difficult to empty the air out of the lungs.” While bronchiectasis, which is characterized by permanent enlargement of bronchi and bronchioles, may lead to obstructed breathing from abnormal mucus production like COPD, evaluation and treatment for both diseases differ.

“Chronic obstructive pulmonary disease and bronchiectasis are different but related diseases that occur separately, but can coexist,” wrote Drs. Shannon A. Novosad and Alan F. Barker, both of Oregon Health and Science University, in “Chronic Obstructive Pulmonary Disease and Bronchiectasis,” published in *Current Opinion in Pulmonary Medicine*. Yet, the chances of concurrent COPD and bronchiectasis are slim: while COPD is the third leading cause of American death, bronchiectasis can be considered an orphan disease that affects approximately 110,000 Americans. However, in one study published in *Egyptian Journal of Chest Disease and Tuberculosis*, “Bronchiectasis in COPD Patients,” 47.8% (33 of 69) of enrolled participants had both bronchiectasis and COPD. The researchers behind the study identified that severe functional impairment, defined as a forced expiratory volume in one second (FEV1) of less than 50%, correlated to developing bronchiectasis, just as greater bacterial colonization and exacerbation rate did, as well.

It can be easy to mistake one disease for the other. Both diseases have symptoms of dyspnea (shortness of breath), chronic cough, potential for daily sputum production, and airflow obstruction. Methods for determining the reason for these symptoms begin with patient history and clinical examination. Patients with COPD commonly have chronic sputum production associated with coughing, yet bronchiectasis patients may have either a dry or wet cough. As more quantitative measures, lung function and imaging tests are also useful in diagnosing the diseases.

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We have a free program to assess indoor air pollutants or irritants in your home. Now when your symptoms are worse is a good time to see what steps you can take to reduce home respiratory irritants. The results of the assessment are completely confidential and many remedies are simple. Call 408 998-5865 to make an appointment.

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COPD is confirmed by a post-bronchodilator FEV1 less than 80% with an FEV1/forced vital capacity (FVC) less than 70%. Bronchiectasis can initially mimic these COPD features, but as bronchiectasis progresses, progressive lung damage can lead to mixed lung function results. Accordingly, thoracic computed tomography (CT) scans are considered the gold standard to diagnose bronchiectasis. A large internal bronchial diameter, thickened bronchial wall, and altered airway geometry evident through CT scans are all indicators of possible bronchiectasis. Imaging results for COPD validate functional tests by highlighting centrilobular emphysema, given that the cause is smoking-related.

It is vital to diagnose one disease versus the other in patients, as “in the early stage of disease [it] is extremely important for the adoption of appropriate therapeutic measures,” according to “Airway Disease: Similarities and Differences between Asthma, COPD and Bronchiectasis,” published in *Clinics*. Treatments for COPD and bronchiectasis are designed to address the unique causes and risk factors for disease. Whereas COPD is largely associated with lung irritants such as pollution and smoking, bronchiectasis is often a result of respiratory infections or lung transplantation. Some cases of disease can also be associated with host factors including alpha-1 antitrypsin deficiency and other host factors, leading new treatments in the pipeline to take a more genetics-based approach.

In both diseases, the body’s natural inflammatory response involves neutrophils, macrophages, and CD8 T-cells as the primary cell types responsible for trying to attenuate damage in the airways. Consequently, COPD is often treated with anti-inflammatory drugs, such as inhaled corticosteroids. However, bronchiectasis often requires an antibacterial approach to stop the vicious cycle of impaired ciliary function leading to bacterial colonization and thick mucus accumulation, leading to inflammation and impairment of mucociliary

clearance. Differing treatment goals also motivate the use of different therapeutic regimens. Whereas “COPD therapy is directed primarily to the relief of symptoms and the prevention of disease progression,” wrote Dr. Rodrigo Anthonazio, of Heart Institute (InCor) in Sao Paulo, Brazil, “In bronchiectasis, the primary goal of treatment is to prevent disease progression and improve the quality of life and symptoms.” At times, intervention for COPD can be as simple as smoking cessation, but first-line treatment usually consists of using short-acting beta2-agonists (SABAs) to dilate the airways. While it may seem counter intuitive to use SABAs to treat bronchiectasis, some studies have combined long-acting beta2-agonists (LABAs) with inhaled corticosteroids and shown benefits for patient quality of life scores.

Despite available treatments, a commonality of both COPD and bronchiectasis is a high hospitalization rate. The most recent data published in the *Chest* article “Hospital Discharges, Readmissions, and Emergency Department Visits for Chronic Obstructive Pulmonary Disease or Bronchiectasis among US Adults: Findings from the Nationwide Inpatient Sample 2001-2012 and Nationwide Emergency Department Sample 2006-2011” indicates that the rate of hospitalization has remained steady for more than 10 years. Over 240 of 100,000 individuals are hospitalized with either COPD or bronchiectasis, and emergency department visits number close to 1.5 million per year.

At times, it can be difficult to directly compare bronchiectasis and COPD, as research specific for bronchiectasis is sometimes scarce. A predicted increase in research comes as a double-edged sword because the increase is warranted due to an increased rate of disease occurrence in the population, despite efforts to mitigate airway disease. As more studies are conducted, the similarities and differences between bronchiectasis and COPD will continue to become more well defined.

from Lung Health News

Music Improves COPD

Music therapy improves the health of patients with chronic obstructive pulmonary disease, a new study finds. COPD is the third leading cause of death in the U.S. Patients with COPD experience symptoms including shortness of breath, wheezing, an ongoing cough, frequent colds or flu, and chest tightness.

Researchers from Mount Sinai Beth Israel Hospital in New York devised a study involving 68 patients with chronic disabling respiratory diseases, including COPD. Over the course of six weeks, a randomized group of these patients attended weekly

music therapy sessions. Certified music therapists oversaw each session, which included live music, visualizations, wind instrument playing and singing, which incorporated breath control techniques.

The therapy also involved encouraging self-expression and provided patients with the opportunity for increased engagement in therapeutic activities and to cope with the challenges of a chronic disease.

The researchers found that the patients who received music therapy in conjunction with standard rehabilitation saw an improvement in symptoms, as well as their psychological well-being and quality of life, according to the study which appears in *Respiratory Medicine*.

from NewsMaxHealth

New Date & Time

Beginning this month, the meeting date and time for Avenidas, 450 Bryant Street, Palo Alto, have changed as we experiment through trial and error what's most convenient for those attending. The next meeting is Wednesday, January 20, 2016 from 10:30 to 11:30 am. The ongoing monthly meetings will be the 3rd Wednesday of the month from 10:30 to 11:30 am.

Meetings for the San Jose BBC group, at 1469 Park Ave. remain the last Monday of the month, from 1:30 to 2:30 pm. Next meeting is

Monday, January 25th. Meetings for Morgan Hill group, Centennial Recreation Senior Center, 171 W. Edmuns-son Ave. re-mains the 2nd Wednesday every other month from 10:30 to 11:30 am. Next meeting is Wednesday, January 13th.



Promote the BBC!

We need your help to spread the word about our Better Breathers Club support group for people with lung disease. Included in the envelop you will find promotional panels with the 2016 locations and dates on one side and the club's description on the other. Please share this printed material with your medical providers, your friends and neighbors, your family, or community members you meet. The strength of a support group is its members sharing their coping skills and knowledge with others, especially those newly diagnosed. Invite them to call Janet (408) 998-5865 to answer any questions. We appreciate your time and effort!

Upcoming Better Breathers Club Meetings

Palo Alto - 3rd Wednesday of each month

Avenidas Senior Center, 450 Bryant Street, Palo Alto, 94301

Wednesday, January 20, 2016

10:30 am to 11:30 am

Morgan Hill - 2nd Wednesday every other month

Centennial Recreation Senior Center 171 W. Edmunson Ave. Morgan Hill, 95037

Wednesday, January 13, 2016

10:30 am to 11:30 am

Breathe California of the Bay Area

1469 Park Avenue

San Jose, CA 95126

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RETURN SERVICE REQUESTED

Better Breathing Newsletter

San Jose - Last Monday of every month

Breathe California office, 1469 Park Avenue, San Jose 95126

Monday, January 25, 2016

1:30 pm to 2:30 pm

A Look Ahead: Upcoming BBC Meetings

San Jose – Monday, February 29, 2016

Palo Alto – Wednesday, February 17, 2016

Morgan Hill - Wednesday, March 9, 2016