

October 2002 Press Releases

## Study Suggests That Sleep-Disordered Breathing (SDB) Causes High Blood Pressure/Hypertension

(NORTHBROOK, IL, October 8, 2002) - Nasal continuous positive airway pressure (CPAP), the usual treatment for sleep disordered breathing (SDB), was found to lower nocturnal blood pressure among men with hypertension. SDB is a condition of repeated episodes of breathing pauses lasting 10 seconds or more due to complete or partial collapse of the upper airway (apnea) or abnormal decrease in depth of respiration associated with lowering of blood oxygen level (hypopnea).

The study by the University of Wisconsin, which is reported in the October edition of CHEST, the peer-reviewed journal of the American College of Chest Physicians, looked at 24 men, ages 30 to 60 with mild to moderate untreated hypertension. The overall objective of the study was to find out if there was an independent causal effect of SDB on blood pressure.

"Our study was unique in that we studied patients with hypertension rather than patients who were already known to have sleep-disordered breathing," said lead study author K. Mae Hla, MD, MHS. "We also used CPAP treatment in the hypertensive patients with no sleep-disordered breathing to control for any other effect that CPAP itself potentially might have on blood pressure independent of its effect through correction of sleep-disordered breathing."

Participants were administered CPAP treatment for 14 days and each had blood pressure taken before, during, and after the CPAP treatment. The study found that the non-SDB participants had no significant change in blood pressure with CPAP meaning that the treatment itself does not alter blood pressure. In contrast, in patients with SDB, nocturnal blood pressure decreased with CPAP therapy. Therefore, SDB appears to have a causative effect in elevating nocturnal blood pressure in patients with hypertension.

Study subjects were recruited from the Employee Health and Primary Care Clinics at the University of Wisconsin Hospital. Among the 14 subjects who had SDB, the mean nighttime systolic blood pressure decreased by 10.3 mm Hg with CPAP treatment and remained reduced by 7.8 mm Hg the night after CPAP treatment was discontinued. The mean diastolic blood pressure decreased by 4.5 mm Hg with CPAP treatment and also remained reduced by 5.3 mm Hg the night after CPAP treatment was discontinued.

"Considering that sleep-disordered breathing is a very common problem yet often not diagnosed, it could be an unrecognized contributor to hypertension in some patients," said ACCP President-elect Udaya B.S. Prakash, MD, FCCP.

CHEST is a peer-reviewed journal published by the ACCP. It is available online each month at [www.chestjournal.org](http://www.chestjournal.org). ACCP represents more than 15,000 members who

provide clinical, respiratory, and cardiothoracic patient care in the U.S. and throughout the world. ACCP's mission is to promote the prevention and treatment of diseases of the chest through leadership, education, research and communication.

November 2002 Press Release

## STUDY SUGGESTS COCKROACH SENSITIZATION LINKED TO ASTHMA MORBIDITY IN URBAN ELDERLY

### Elderly Sensitized to Cockroach Allergens Experience Increased Airway Obstruction and Hyperinflation

(NORTHBROOK, IL, November 12, 2002) - Cockroach (CR) allergens may play a significant role in urban asthma morbidity, particularly among the elderly. A study conducted at the New York University School of Medicine found that urban elderly with asthma were most commonly sensitized to CR allergens and that CR sensitization was associated with increased airflow limitation, hyperinflation, and irreversible airway obstruction.

The study, published in the November edition of CHEST, the peer-reviewed journal of the American College of Chest Physicians, investigated the relationship between allergen sensitization and increased severity of airway obstruction in 45 urban, non-smoking patients, age 60 or older, who were physician-diagnosed with asthma.

"Research has shown cockroach as the most significant allergen in children and adults with asthma. However, there is very little known about asthma and the elderly," said lead study author Linda Rogers, MD, FCCP, Assistant Professor of Medicine at New York University School of Medicine and Attending Physician at Bellevue Hospital Asthma Clinic. "This study suggests that cockroach is a highly significant allergen to all age groups."

Patients' sensitizations to total indoor and outdoor allergens were identified through radioallergosorbent testing (RAST). Results indicated that 53 percent of patients were sensitized to at least one indoor allergen, while 20 percent were sensitized to at least one outdoor allergen. Results showed that CR was the most common indoor allergen to which 47 percent of patients were sensitized. Physicians compared RAST results to patients' pulmonary function and found that patients sensitized to indoor allergens had decreased pulmonary function. No relationship was found between pulmonary function and outdoor allergen sensitization.

Spirometry and plethysmography tests were used to determine the association between pulmonary function and patients' sensitivity to CR allergens. Results showed that airflow, as measured by forced expiratory air volume, was significantly lower in patients with CR sensitivity (CR+) as compared to patients without CR sensitivity (CR-). In addition, CR+ patients had a greater elevation in functional residual capacity and residual volume.

To determine airflow recovery, patient response to bronchodilator (BD) administration was evaluated. CR+ and CR- patients showed a similar degree of improvement following BD administration. However, CR- patients achieved a normal post-BD level, while CR+ patients demonstrated persistent airway obstruction.

Patients who had been enrolled in the Bellevue Hospital Asthma Clinic in urban New York between 1991 and 1998, were evaluated for entry into the study. Of the 114 patients eligible to participate, 92 patients completed spirometry testing and 45 patients completed all necessary testing.

"This study reinforces the need for consistent monitoring and care for elderly with asthma," said Richard S. Irwin, MD, FCCP, president-elect of the American College of Chest Physicians. "By knowing which allergens older patients are most sensitized, as clinicians, we can offer more effective asthma treatments and advise them on appropriate lifestyle modifications."

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December 2002 Press Release

## AMERICAN COLLEGE OF CHEST PHYSICIANS NAMES NEW PRESIDENT

Udaya B. S. Prakash of Mayo Clinic to Lead ACCP

(Northbrook, IL, December 10, 2002) - Udaya B. S. Prakash, MD, FCCP, was named President of the American College of Chest Physicians (ACCP) at CHEST 2002, the College's 68th Annual International Scientific Assembly, November 2-7, 2002, in San Diego. Dr. Prakash is the Edward W. and Betty Knight Scripps Professor of Medicine at Mayo Medical School and Mayo Graduate School of Medicine; and consultant in Pulmonary, Critical Care, and Internal Medicine and director of Bronchoscopy, Mayo Clinic and Mayo Medical Center, Rochester, MN.

"One of my main objectives as President of the ACCP will be to actively promote the long held maxim that the College is a university without walls, and its main objectives are education, education and education," said Dr. Prakash. "Providing education and practice guidelines by more effective methods, and enhancing techniques of communication between leadership and staff of the ACCP and the membership of the College will be explored."

Dr. Prakash received his medical degree from Bangalore Medical College in Bangalore, India. He completed internships at Bangalore Medical College and Toledo Hospital in Toledo, Ohio. He continued his professional training at Mayo Clinic and Mayo Graduate

School of Medicine where he received his residency training in internal medicine and fellowship training in thoracic diseases and critical care medicine.

As a Fellow of the ACCP, Dr. Prakash has held several leadership positions, including Chair of the Nominations Committee and Chair of the CHEST 1999 Scientific Program Committee. He has been a member of the Continuing Education Committee and The CHEST Foundation Pro Bono Committee. In addition, Dr. Prakash was responsible for initiating and implementing the ACCP/CHEST Foundation medical relief effort in Honduras after Hurricane Mitch in 1999.

"I am very interested in broadening the philanthropic focus of The CHEST Foundation and its important role in providing guidance and leadership to our membership worldwide," said Dr. Prakash. "The CHEST Foundation's objective, volunteerism by members of the College, will be encouraged."

Dr. Prakash has served at Mayo Medical School and Mayo Graduate School of Medicine for over 25 years. He has been awarded "Best Teacher of the Year" and reaffirmed into the Hall of Fame by the Association of Fellows of the Mayo Graduate School of Medicine. He has led numerous professional activities, including being the Editor in Chief for Mayo Clinic Proceedings and the Journal of Bronchology; peer reviewer for more than 10 medical journals; President of the American Association for Bronchology; and Vice Chairman for the World Association for Bronchology. Dr. Prakash has authored over 250 scientific publications in his specialties of pulmonology, critical care, and interventional pulmonology.

Dr. Prakash and his wife Pushpa live in Rochester, MN. Pushpa Prakash became chair of the Ambassadors Group at CHEST 2002. The Ambassadors Group is comprised of ACCP spouses and other interested individuals who serve as "emissaries" to help the ACCP and The CHEST Foundation improve patient care and lung health through education.

ACCP represents more than 15,000 members who provide clinical, respiratory, and cardiothoracic patient care in the U.S. and throughout the world. ACCP's mission is to promote the prevention and treatment of diseases of the chest through leadership, education, research, and communication. The CHEST Foundation is the philanthropic arm of the College whose mission is to provide resources to advance the prevention and treatment of diseases of the chest.