

Video-Based Ultrasound Series From CHEST Learn to integrate point-of-care ultrasound in patient management.



### American College of Chest Physicians

CHEST Publications | CHEST Journal | Books | Topic Collections | Mobile | Store

Search All Publications

Sign In

All Content

SEARCH

Search CHEST Journal

SEARCH Author and Advanced Search

Home

Online First Current Issue

All Issues

**CHEST Collections** 

Guidelines

CHEST Meeting Abstracts Podcasts

For Authors

October 2004, Vol 126, No. 4 MeetingAbstracts

< Previous in this issue

Next in this issue >

Abstract: Slide Presentations | October 2004

## Cardiovascular Hemodynamics in Patients with Sleep Disorder Breathing FREE TO VIEW

Naveen Saxena, MD\*; Vinita Srivastava, MD; Chanda Craft, BS Author and Funding Information

Chest. 2004;126(4\_MeetingAbstracts):730S. doi:10.1378/chest.126.4\_MeetingAbstracts.730S-a

Text Size: A A A

Article

#### **Abstract**

PURPOSE: Sleep Disorder Breathing (SDB) is associated with increased Cardiovascular Morbidity and Mortality. There are few studies utilizing Right and Left Cardiac Catheterization for assessment of Cardiovascular Hemodynamics in patients with Sleep Disorder Breathing. Our study examines the effect of Sleep Disorder breathing on Cardiovascular Hemodynamics.

METHODS: This study is a retrospective chart review of 63 confirmed SDB patients selected from the general population of a community practice in South Carolina, who underwent both Polysomnography and Right and Left Cardiac Catheterization. The tests were ordered independently of one another based on presenting symptoms. The indications for Polysomnography included snoring, fatigue, somnolence, and insomnia. The indications for Right and Left Cardiac Loading [MathJax] [Authorization: statement and sold on exertion.

> RESULTS: Of the 63 patients included in the study, 85.7% had Pulmonary Artery Systolic Pressure (PA) >30. Eighty percent of patients had normal Left Ventricle function. The data was analyzed using Student's t-test and Wilcoxon's Signed Rank Test. The norms for Right Ventricle Systolic Pressure (RV), Right Atrial Pressure (RA), and PA were defined as RV=30, RA=10, and PA=30. The null hypothesis for RV was rejected using both methods with p<.0001. The null hypothesis for RA was rejected for both methods with p=.0036 and p=.0043 respectively. The null hypothesis for PA was rejected for both methods with p≪26>.0001 and p<.0001 respectively.

> CONCLUSION: Sleep Disorder Breathing is associated with abnormal cardiovascular hemodynamics as evidenced by elevated RV, RA, and PA pressures. Our data suggests that the population means of RV, RA, and PA (for patients with Respiratory Distress Index >10) are above the

CLINICAL IMPLICATIONS: Early detection and effective treatment of SDB may minimize cardiovascular morbidity and mortality. Further prospective, randomized study is needed to examine the effect of SDB on cardiovascular hemodynamics.

DISCLOSURE: N. Saxena, None.

Monday, October 25, 2004

2:30 PM- 4:00 PM

Some tools below are only available to our subscribers or users with an online account

Print

Email

Share

Get Citation

Article Alerts Web of Science® Times Cited: 0

Learn to integrate point-ofcare ultrasound in patient management.

Video-Based **Ultrasound Series** From CHEST

Ultrasound Corner

#### **Related Content**

Customize your page view by dragging & repositioning the boxes below.

**CHEST Journal Articles** 

Filter By Topic >

A Dynamic Model Integrates Multisystems for Breathing Control

Chest. 2011;140(4\_MeetingAbstracts):692A. doi:10.1378/chest.1119528

A Study of Characteristics of Michigan **Welders With Breathing Problems** Reported as Work-Related Asthma

Chest. 2010;138(4\_MeetingAbstracts):552A. doi:10.1378/chest.10182

Agreement Between Impedance Pneumography and Pneumotachograph in Estimation of a Tidal Breathing Parameter

Chest. 2010;138(4\_MeetingAbstracts):816A. doi:10.1378/chest.10384

[+] View More

**PubMed Articles** 

Acute exposure to diesel exhaust impairs nitric oxide-mediated endothelial vasomotor function by increasing endothelial oxidative stress.

Hypertension2013;;62(2):352-8.
Noninvasive evaluation of right atrial pressure.

J Am Soc Echocardiogr2013;;26(9):1033-42.

All Results at PubMed.gov
Results provided by:

CHEST Journal
Print ISSN: 0012-3692
Online ISSN: 1931-3543







**CHEST Publications** 





#### **CHEST Journal**

Home
Online First
Current Issue
All Issues
CHEST Collections
Guidelines

CHEST Meeting Abstracts
Podcasts
For Authors

Instructions & Policies
Submit a Manuscript

#### **CHEST Books**

Home
Pulmonary Medicine
Critical Care Medicine
Sleep Medicine
Pediatric Pulmonary Medicine
Topic Collections

Services

RSS Feeds e-Mail Alerts

Home

Mobile

Store

**Topic Collections** 

For Individuals
For Libraries & Institutions
For Consortia
For Subscription Agents
Rights & Permissions
Reprints & e-Prints
Advertising & Recruitment
Medical Employment

Subscription Information:

# General Information

About CHEST Publications
About the American College of Chest
Physicians
Terms & Conditions
Privacy Policy

Media/Embargo Policy
Advertising Disclaimer
Contact Us





Copyright © by the American College of Chest Physicians

Powered by SILVERCHAIR