COPD’s Global Toll Is Far Greater Than Commonly Assumed
Study uncovers unexpected prevalence.

BY JONATHAN GARDNER
Elsevier Global Medical News

The burden of chronic obstructive pulmonary disease is underestimated worldwide, and there are higher levels and more advanced forms of the disease than have been reported, according to an international study documenting prevalence.

Researchers found that smoking and advanced age increased the likelihood of developing chronic obstructive pulmonary disease (COPD), but reported that the prevalence of COPD in people who have never smoked, as well as in younger patients, suggests that other factors—such as tuberculosis and exposure to particulates and fumes through occupation or the use of biomass fuels—may also play a role.

The study, from sites in 12 countries involving 9,425 subjects aged 40 years or older who were tested by spirometry, found an overall prevalence of 10% for stage II or higher COPD (12% for men, and 9% for women), wrote Dr. A. Sonia Buist of Oregon Health and Science University, Portland, and her colleagues.

The sites were Adana, Turkey; Bergen, Norway; Cape Town, South Africa; Guangzhou, China; Hannover, Germany; Krakow, Poland; Lexington, Ky.; Manila, Philippines; Reykjavik, Iceland; Salzburg, Austria; Sydney, Australia; and Vancouver, B.C., Canada.

Across the sites, the likelihood of developing stage II COPD increased for smokers, with an odds ratio of 1.2 for each additional 10-pack years (defined as the number of packs per day over the course of a year) the study found. For each additional 10 years of age, the odds ratio of developing stage II COPD was 1.84, the researchers wrote.

Past reviews of COPD data worldwide have found lower levels and more advanced forms of the disease than have been looked at by a sleep study of more than 10,000 British civil servants. "The ACCP’s new guidelines outline evidence-based approaches to diagnosis and treatment," the ACCP’s new guidelines outline evidence-based approaches to diagnosis and treatment.

Sleep Duration Linked to Mortality Risk

BY TIMOTHY P. KIRN
Elsevier Global Medical News

Both too much sleep and not enough sleep appear to be associated with increased mortality, according to a new longitudinal study.

Sleeping less than 6 hours per night or more than 9 hours per night was associated with almost twice the mortality risk of sleeping 6-8 hours per night, according to an analysis of sleep data from a prospective cohort study of more than 10,000 British civil servants.

The findings were recently presented at a meeting of the British Sleep Society, and the research article has been accepted for publication in the journal Sleep (www.journalsleep.org/ Accepted.aspx).

The investigators found that a decrease in the amount of time slept was associated with increased mortality from cardiovascular causes. Furthermore, an increase in sleep time was associated with an excess of mortality from all other causes, according to Jane Ferrie, Ph.D., of University College London, and her colleagues.

Previous studies have reported a U-shaped relationship between time sleeping and mortality, the investigators said. What has not been looked at by a sleep study before is the effect a change in sleep patterns might have.

The researchers examined sleep data collected from British civil service employees aged 35-55 years who were enrolled beginning in 1985 in a long-term study known as Whitehall II. Baseline sleep duration data were presented at a meeting of the British Sleep Society, and the research article has been accepted for publication in the journal Sleep (www.journalsleep.org/ Accepted.aspx).

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COPD Burden Assessed

Global Toll • from page 1

prevalence rates, ranging between 0.6% and 4% in men and 0.2% and 3.2% in women, although ‘the general perception is that these estimates are not accurate,” according to Dr. E.F.M. Wouters, FCCP, of University Hospital Maastricht (the Netherlands) in his commentary. “Further quantification of the burden of COPD is, therefore, crucial” for public health planning, Dr. Wouters added.

The researchers wrote that their findings suggest that international public health officials need to prepare for a higher disease burden in the future. “Our estimates of the overall prevalence and staging of COPD are consistently higher than these figures, which accord with claims that COPD has generally been underestimated in the past,” they said. The authors found that the prevalence of stage II or higher COPD was greatest Cape Town (22% among men and 17% among women). Men in Cape Town also had the highest proportion of subjects who had smoked 20 or more pack-years (34%), but Cape Town women were only third in that ranking. Researchers cautioned that the small number of subjects at each test site (minimum 300 men and 300 women) prevented within-site analysis because of the low absolute number of COPD patients at each site. In addition, they noted that Lexington, Ky., and Vancouver, B.C., had lower response rates because they recruited patients through random-digit dialing, a weakness that could have introduced some bias. A second Lancet study on the risk of COPD from passive smoking in China found that adults at the highest exposure levels had increased odds of developing COPD, according to Peng Yin of the University of Birmingham (England) and colleagues (Lancet 2007;370:731-7).

The survey of 6,497 members recruited patients through randomization, the University of Birmingham (England) and colleagues (Lancet 2007;370:731-7).

Routine ICU Epo Use Not Supported

Epoetin • from page 1

The proportion of patients who received a red cell transfusion between days 1 and 29, the primary end point, was 46% among those who received epoetin and 48% among those who received placebo. The mean number of red cell units transfused per patient between days 1 and 42, a secondary end point, was also similar among those on epoetin (4.5 U) and those on placebo (4.3 U).

The change in hemoglobin concentration from baseline, another secondary end point, was significantly more among those on epoetin at day 29, when it was 1.6 g/dL higher, compared with 1.2 g/dL higher among those on placebo, a significant difference. The absolute hemoglobin value at day 29—11.2 g/dL versus 10.8 g/dL—was also significantly higher among those on epoetin. But at day 42, the differences in hemoglobin concentrations between the two groups were no longer significantly different.

At day 29, mortality in the overall population was significantly lower among those on epoetin (8.3%) than among those on placebo (11.4%). Among the trauma patients, mortality was 5.3% among those treated with epoetin and 6.6% among those on placebo, also a significant difference. Mortality followed a similar pattern at 140 days. The mortality difference was the most important finding of the study, the authors said.

Among those on epoetin, the incidence of thrombotic vascular events through 140 days was significantly higher among those who received three doses of epoetin (23%, compared with 16% for those who received three placebo doses). A greater proportion of patients who received one and two doses of epoetin had thrombotic events compared with those who received one and two doses of placebo, but those differences were not significant.

The researchers wrote that their findings suggest that the use of epoetin alfa would improve clinical outcomes by preventing adverse events with red blood cell transfusions, but “this was not the case,” the authors said, and pointed out that mortality was reduced, despite the lack of an effect on transfusions.

On the basis of available data, “we believe that epoetin alfa could benefit trauma patients remaining in an ICU for more than 48 hours,” who have hemoglobin concentrations under 12 g/dL and no history of thrombolytic disease, and who meet other inclusion criteria of their study.

Until more studies are done, the data suggest that epoetin alfa should not be used in a patient who has not spent at least 48 hours in the ICU, they added.

In an editorial, Dr. Deborah Cook and Dr. Mark Crowther, of the department of medicine at St. Joseph’s Healthcare, McMaster University, Hamilton, Ont., said that it was “breathtaking but premature” to suggest that treatment with epoetin alfa could save the lives of trauma patients who have hemoglobin concentrations below 12 g/dL, who have been in the ICU for at least 48 hours, and have no renal insufficiency or history of venous thromboembolism.

The absolute difference in the number of trauma patients who had died at day 29 and 140 was small, “and is insufficient to provide support for the routine use of erythropoietin in practice,” they wrote (N. Engl. J. Med. 2007;357:1037-9).

The Procrit brand of epoetin alfa was used in the study. Four of the study authors were from Johnson & Johnson Pharmaceutical Research and Development, which sponsored the study. Several of the authors disclosed that they received consulting and/or lecture fees from Ortho Biotech and/or Johnson & Johnson Pharmaceutical Research and Development. Drs. Cook and Crowther reported no ties to the manufacturer.

Dr. Stephen Pastores, FCCP, comments: Given that epoetin alfa did not reduce the incidence of red cell transfusion (in the context of a restrictive transfusion strategy) and its association with an increased risk of thrombotic events, the routine use of epoetin alfa cannot be recommended in the critically ill. Furthermore, the finding of a decreased mortality among trauma patients treated with epoetin alfa must be interpreted cautiously, because of the small absolute difference in the number of deaths between the placebo group and the epoetin alfa group.

CHEST PHYSICIAN, • OCTOBER 2007
Predictive Markers Useful in Scleroderma Lung Disease

BY NANCY WALSH
Elsevier Global Medical News

Barcelona — Following three serum markers of disease activity could provide a simple, noninvasive means of monitoring the efficacy of cyclophosphamide plus corticosteroids demonstrated significant benefits in improving scleroderma lung disease (N. Engl. J. Med. 2006;354:2655-65).

However, thus far no means of monitoring treatment response have been established, according to Dr. Chihiro Tanaka of Kanazawa (Japan) University.

Serum levels of surfactant protein-A (SP-A) and SP-D have been reported to reflect disease activity in interstitial lung diseases such as idiopathic pulmonary fibrosis and pulmonary pro- teinosis, Dr. Tanaka wrote in a poster session at the annual European College of Rheumatology. Surfactants are proteins secreted by type II alveolar cells that help maintain the elasticity of pulmonary tissue. SP-D also plays an important role in the innate immune system in the lungs (J. Rheumatol. 2004;31:1112-20).

The third marker, KL-6, is a glycoprotein antigen expressed primarily on type II pneumocytes in the alveoli and on respiratory bronchiolar epithelial cells. Elevations of this antigen have been observed in multiple types of interstitial lung diseases, including idiopathic interstitial pneumonia, sarcoidosis, and pulmonary arterial hypertension.

Concentrations of KL-6 also have been shown to be higher among patients with systemic sclerosis who have pulmonary fibrosis, compared with patients with systemic sclerosis and the major cause of death in this condition. Findings from a double-blind trial of cyclophosphamide plus corticosteroids demonstrated significant benefits in improving scleroderma lung disease (J. Rheumatol. 2000;27:930-4).

In the four patients whose HRCT findings did not change following treatment, serum levels of KL-6, SP-D, and SP-A also did not change.

In the two patients whose HRCT findings worsened, serum levels of KL-6 and SP-D increased rapidly until the third cycle, while SP-A levels did not change.

Taken together, these three markers could provide a way of evaluating response to cyclophosphamide treatment that is less expensive and noninvasive, compared with HRCT and bronchoalveolar lavage, he concluded. SP-D may prove to be the most sensitive, he added.

Possible mechanisms for the elevation of these markers in patients with scleroderma-associated lung disease include increases in total numbers of type II cells and increased secretion by each type II cell, as well as increased leak from the airspace into the interstitium and decreased clearance from the vascular compartment (Eur. Respir. J. 2002;19:439-46).

Dr. Susan Harding, FCP, comments: These preliminary data need to be supported with a large cohort. The Scleroderma Lung Study examined the effect of 1 year of oral cyclophosphamide on scleroderma lung disease, showing a beneficial effect (N. Engl. J. Med. 2006;354:2655-65). Tashkin and colleagues recently reported their outcomes at 2 years, showing continued beneficial effects on pulmonary function through 15 months, which then dissipated (Am. J. Respir. Crit. Care Med. 2007;176:2127-38).

Iridaparinux Was Effective For DVT, but Not for PE

BY MARY ANN MOON
Elsevier Global Medical News

The synthetic pentasaccharide irudaparinux was as effective as standard anticoagulant treatment in preventing long-term recurrences of deep vein thrombosis but not short-term recurrences of pulmonary embolism in a worldwide clinical trial comparing the two approaches.

When irudaparinux therapy was extended for a further 6 months, it prevented long-term recurrences of both types of thromboembolism, but raised the risk of hemorrhage to such a degree that the net clinical benefit was deemed ‘marginal,’ researchers said.

Iridaparinux is a long-acting inhibitor of activated factor X with a substantially longer half-life than the related anticoagulant fondaparinux. Its advantage over standard anticoagulation therapy in venous thromboembolism (VTE) is that it is administered in once-weekly subcutaneous injections at a fixed dose that doesn’t require any adjustment or laboratory monitoring.

Dr. Harry R. Buller of the University of Amsterdam and his associates in the van Gogh studies, evaluated irudaparinux for VTE at 145 medical centers in 25 countries. The studies were funded by the drug’s manufacturer, Sanofi-Aventis.

The first report involved two parallel randomized open-label trials comparing the efficacy and safety of irudaparinux with those of standard anticoagulant therapy in patients with deep vein thrombosis (2,904 subjects) or pulmonary embolism (2,215 subjects). The patients were treated for 3-6 months.

For the DVT patients, the incidence of recurrent thromboembolism was similar with irudaparinux as with standard therapy. However, the drug’s efficacy was inferior to that of standard therapy for PE. “This difference in efficacy was due to an excess of early fatal and nonfatal recurrences of PE and was associated with an increase in total mortality,” Dr. Buller and his associates said (N. Engl. J. Med. 2007;357:1094-104).

“A plausible explanation for the observation of short-term recurrence in the study is that only a proportion of patients with VTE probably had concurrent asymptomatic PE,” they noted.

Adverse bleeding event rates with irudaparinux were similar to or lower than those with standard therapy.

Another factor that was not specifically addressed in these two trials, but which should be considered in evaluating the risks and benefits of irudaparinux, is the absence of a specific test for identifying anticoagulant that could be administered during bleeding. [This] is a particular liability for an agent with such a long duration of action,” the van Gogh investigators pointed out.

In the second report, Dr. Buller and his associates evaluated an additional 6 months of prophylaxis using irudaparinux compared with placebo. The 1,215 subjects were followed for a further 3-6 months after discontinuing the drug.

Iridaparinux reduced the frequency of recurrent thromboembolism to 1%, compared with nearly 4% for placebo, for a relative risk reduction of 73%. However, there was an excess of major bleeding episodes, including fatal hemorrhages, with the drug—an overall rate of nearly 3%, compared with no such episodes in the placebo group.

These observations suggest a prolonged risk of hemorrhage in patients treated with irudaparinux for more than 6 months, the investigators said (N. Engl. J. Med. 2007;357:1109-12).

This trial showed the efficacy of irudaparinux during a 6-month extended treatment period, at the expense of an increased risk of bleeding. We conclude that the net clinical benefit of such treatment is marginal,” they noted.

PAH Drug Sitaxsentan Faces Uncertain Approval Future in United States

The manufacturer of sitaxsen- tan continues to pursue U.S. approval of the endothelin re- ceptor antagonist for treating pul- monary arterial hypertension, after receiving its third notice from the Food and Drug Admini- stration that the supporting applica- tion lacked evidence of effectiveness. The FDA is reviewing sitaxsentan for treating pulmonary arterial hypertension (PAH). But in June, manufactur- er Encysive announced that it had received a third “approvable” letter for the drug from the FDA, stating that the drug’s effective- ness had not been demonstrated, but that there was some evidence of improved exercise tolerance and that the company should continue to conduct.

In response to the company’s subsequent request for a formal dispute resolution on the new drug application (NDA), the FDA reviewer “agreed with the deci- sion of the Division of Cardio- vascular and Renal Products that, while the data provided in the NDA are suggestive of the effective- ness of (sitaxsentan), it did not provide the substantial evidence of effectiveness needed for approval,” the company announced in September. The reviewer encouraged the company to conduct another study to show the drug’s effectiveness in exercise capacity as measured by the change in 6-minute walk dis- tance.

The company is working with outside clinical and statistical ex- perts to develop another phase III study protocol, “so we can move ahead quickly with a new trial if it is ultimately deemed approvable in the United States,” George Cole, president and chief executive officer of Encysive, said in a statement. “We continue to believe that the issue raised by the FDA was sufficiently ad- dressed in the NDA.” Sitaxsentan is approved for treating PAH in Europe, Canada, and Australia.

If approved, sitaxsentan would be the seventh drug approved by the FDA for treating PAH, the second to receive an antagonist ambrisentan (Letairis) approved by the FDA in June.

—Elizabeth Mechcatie

OCTOBER 2007 • CHEST PHYSICIAN PULMONARY MEDICINE 3
You asked for fewer buttons, bells and whistles in the hectic ICU. A device that can move as quickly and efficiently as you. Impressively clear images, since this is no time for guesswork. And we listened. Introducing ultrasound designed specifically for critical care, the SonoSite® S-ICU™. See what you inspired.
The S-ICU™ ultrasound tool.
Exactly what you need for critical care. Period.

To see how easy the S-ICU really is, visit SonoSite.com
to schedule a demo. And while you’re at it, check out our
new M-Turbo™ ultrasound tool for broader applications.

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The Expert Panel recommends the use of multifaceted, clinician education programs that reinforce guidelines-based asthma care and are based on interactive learning strategies (Evidence B). This quote from the section of the full report titled “Education for a Partnership in Asthma Care” highlights a discussion of the evidence supporting improvement and standardization in the quality of care given to people with asthma. An extensive literature search from 1997 through 2006 was undertaken to identify studies that focused on methods of implementing guideline-based practice. The process of implementation is designed to change the behavior of clinicians. Reasons for lack of adherence to guidelines were shown in an observational study (Caban et al. Arch Pediatr Adolesc Med 2001;155:1057) that identified the barriers to pediatricians’ adherence to asthma guidelines. Lack of time, lack of educational resources, lack of support staff, lack of feeling competent in educating patients with asthma, and, what they considered to be a major barrier, lack of reimbursement were all cited as reasons for not adopting guideline-directed care. The review of the literature identified that multifaceted clinician education programs based on interactive learning strategies can improve quality of care and patient outcomes. If the multifaceted, tailored intervention to the audience is not undertaken, the standard “guideline” talk, with or without feedback, is unlikely to promote change in general practice care.

Interactive learning strategies present a promising venue for moving forward to both improve and standardize care for all patients with asthma. An extensive literature review was conducted over three cycles over an 18-month period for the development of NAEPP from March 2004 through March 2006, with additional major articles included until May 2007. The combined number of titles screened from these three cycles was 15,444, which did not include many titles identified by the panel members. Of these, 1,654 articles serve as a reference resource updated to update the guidelines and are available on the NHLBI Web site. Evidence tables were prepared for selected topics to better assess the weight of the evidence to support the recommendations being made. Panel members only included ranking of evidence for recommendations because this is more feasible in the scientific literature reviewed. The system used to describe the level of evidence is as follows (Jadad et al. BMJ 2000; 320: 357).

Evidence Category A: Randomized controlled trials (RCTs), rich body of evidence with substantial numbers of studies with large populations participating.

Evidence Category B: RCTs, limited body of evidence. Data is from end points of intervention studies that include only a limited number of patients, post hoc or subgroup analysis of RCTs, or meta-analysis of RCTs.

Evidence Category C: Nonrandomized trials and observational studies.

Evidence Category D: Panel consensus judgment. Clinical literature addressing the subject was insufficient to justify placement in one of the other categories but provision of some guidance was deemed valuable. In addition to specifying the level of evidence, an additional category of recommendation was agreed upon by the Expert Panel. The Expert Panel agreed to indicate the strength of the recommendation by using the term “is recommended.” When the phrase “should, or may be considered,” is used, this indicates the recommendation for application to clinical practice is less strong. This distinction was the panel’s effort to address nuances of using the evidence ranking system. The process behind the development of EPR 3: Full Report 2007 included interpretation of the evidence, drafting of summary statements of the literature reviewed, reviewing comments from various external reviewers, and responding to queries raised during public review of a draft version from February through March 2007. In summary, the process behind the NAEPP “Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma—Full Report 2007” represents the commitment and efforts of the NHLBI/NAEPP to produce evidence-based guidelines that are practical for clinicians to incorporate into their practices.

Given the 3-year process for development of the new document and the differences from 2004 to 2007, it is important to recognize that asthma is a chronic disease that is not well controlled, patients with a history of severe exacerbations, or in patients who are poor perceivers of their airflow obstruction and symptoms.

Pre- and postbronchodilator spirometry is encouraged when considering the diagnosis; repeated once the patient’s condition has stabilized while receiving therapy, which is usually at 3 to 4 months into therapy, during periods of progressive or prolonged loss of asthma control; and, at a minimum, every 1 to 2 years, depending on the patient’s asthma control.

The components of current impairment include the following symptoms: daytime symptoms, nighttime awakenings, need for rescue inhalers (short-acting bronchodilators), interference with normal activities (work, school, recreational/athletic endeavors), and quality-of-life assessments. Quality of life assessments include any work or school missed because of asthma, any disturbance in sleep due to asthma, any change in caregivers’ activities due to a child’s asthma, and any reduction in usual activities. Evaluation of clinical trial data and observational studies has confirmed that the parameters for the impairment domain (symptoms, activity levels, and pulmonary function) reflect increasing gradients of severity, especially in studies of adults.

A closely related and second dimension of severity is the concept of future risk of adverse events, including exacerbations, irreversible loss of pulmonary function, risk of death, and risk of potential adverse response to medications. The assessment of risk in the future requires a careful medical history; observation, and clinician judgment. Although the classification of severity in EPR 3 focuses on the frequency of exacerbations, it is important to note that the severity of disease does not always correlate with intensity of exacerbations, which may vary from mild to life-threatening. Any patient with...
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is my final column as President of the ACCP. which calls for retrospection, analysis, a look
ahead, and some reflection on what it has meant to me personally. One of the things I was told as “Presi
dent Designate” was, “Mark, you have to have a theme” for the year as President. My first reaction can be sum
marized delicately here, “Don’t Make the ACCP Worse.” The members will have to judge if the College is
better, worse, or the same as last year. My “official” and loftier theme was about building teams to improve the College, our profession, and most of all, the care we give to our patients. I believe that we can look back and agree that we moved ahead in many areas, with some extraordinary successes and few back
ward steps. We also did it with team efforts and despite increasing governmental and reg
ulatory scrutiny of professional organiza
tions, contracting budgets, and increasing competition from other organizations.
To me, the primary goal of the College is to offer the best education in the world in chest diseases, critical care, and sleep medicine. Here, we accomplished much in the last 2 years. The journal CHEST has a new look and new standards about what gets published. As a result, the journal is better than it ever was, and I believe that most of our clinician col
leagues would agree that CHEST is the most important, relevant, and therefore valuable, peer-reviewed journal in our field. The Health and Science Policy Committee has designed and implemented processes for developing evi
dence-based clinical practice guidelines that are recog
nized increasingly as the profession’s standard. Our board review courses for pulmonary medicine and criti
cal care medicine are already the best anywhere, and, this year, the College offered our second Sleep Medicine Board Review Course. Surpassing all expectations, this “sold out” course had an even higher attendance than the other two board reviews, and the evaluations were consistently outstanding, confirming the College’s im
portance in sleep medicine and education.
The ACCP is on the verge of implementing some bold and innovative strategies to bring us to a different level as an educational organization. At CHEST 2007, we are in
roducing a new concept that clearly identifies each ses
sion’s format, where it fits into our overall curriculum, that we are using the type of instruction and methodology used. You ask, “So what? I just come to hear good speakers on good topics.” So you should, but our new approach will offer a variety of educational methods that provide interactive experiences and simulated clinical en
vironments that are proven to be more effective than standard lectures. Starting with CHEST 2007, all ACCP CME certificates will be issued elec
tronically after the attendee provides the feedback that we need to make these meetings even better. This is not a traditional CME certificate that only reflects the total hours attended. Rather, it also categorizes the hours by instructional methodology and specifies the hours linked to common areas required by state medical licensing requirements.
This year saw major progress in the Col
gress’s use of simulation technology and in
structional methods in our educational programs, and we will soon have a permanent simul
ation center at ACCP headquarters in Northbrook, IL. There, we will offer programs that will probably provide the most effective educational experiences anywhere.
The ACCP embraced the use of ultrasonography in pul\nmonary and critical care medicine, and we ran our first large, hands-on course on this year. It was so well received, that we learned to do it annually. We will work this year with our expert colleagues from France to develop standards for training in this important field.
Another major component of the College’s work is to advocate for our patients and our profession. It was a good year here, too. The Patient Focused Critical Care Enhancement Act was introduced into the Senate largely as a result of our efforts in collaboration with ATS, SSCM, and AACN. The Capitol Hill Caucus was well
attended and inspiring, as always, and we learned from political insiders more about the enormity of the prob
lems with our “system” of health care and the impor
tance of these issues in the upcoming presidential election. We also emerged with new knowledge that we need to focus our advocacy activities on issues that distin
guish our members and our patients from others in med
icine. Yes, we need to advocate forcefully to change the Medicare Sustainable Growth Rate formula that is dri
ving physicians away from caring for patients, but we also need to advocate for (among other things) our pa
tients’ ability to use portable oxygen concentrators on all commercial airlines and for them to be covered under Medicare and Medicaid for pulmonary rehabilitation ser\vices. Our advocacy efforts will be planned and executed increasingly by collaboration among the ACCP Gover
nors, Government Relations Committee, and Practice Management Committee.
The College’s international efforts are also expanding. We are increasing our collaboration with the major international professional organizations and some national societies to improve education and patient care. Our international Regents and Governors are calling for more programs outside of North America and an increased role in the operations of the College; in response, we constituted a strategic planning group that will meet soon to plan for these efforts.
The ACCP does many great things, and putting it to
gether involves many disciplines working in complex rel
ationships. All of the College’s accomplishments are attributable to the forward thinking and intense effort by teams of ACCP staff and our volunteer members. The individuals who comprise these teams are paragons of commitment, ability, and innovation. We also manage somehow to accomplish this as friends. Speaking for myself, I look forward to every project I work on with others at the College. Dr. Alvin Thomas will assume the challenges, responsibilities, and satisfaction that come with being ACCP President, and I wish him the best.
On reviewing this manuscript, it looks more like a “State of the Union” than a “Farewell to the Troops.” Rightly so, because I’m not leaving—working with the College is one of the most fulfilling things that any of us can do. I will stay on to work with all of the wonderful staff and members as long as I can. Starting immediately, and for the next few years, I am delighted to have the oppor
unity to become more active in the efforts of the Education Committee. See you around.

Continued from previous page

BY DR. MARK I. ROSEN, FCCP

Diagnosis and Management of Asthma
University of Nevada School of Medicine
Reno, NV

• OCTOBER 2007

asthma, even intermitter asthma, can have a severe exacerbation. This is why the new guideline removed the term “mild” intermitter and replaced it with “intermittent,” which should emphasize that patients at any level of severity are at risk for severe, life
threatening exacerbations. The frequency of exacerbations requiring oral systemic corti
costeroids has been reduced in observational stud
ies with the designation of persistent, rather than intermittent asthma. Utilizing the frequency and intensity of ex
acerbations has been incorporated into the classification of severity in this document. For all age groups, the more frequent and intense the exacerbation, the greater the degree of underlying disease severity. All figures on severity in the document include a detailed discussion on this issue in the “note” section of the figure.
Once severity is determined using the dom
inantly used physician’s assessment, appropriate medication and other therapeutic interven
tions are initiated. Classifying severity is em
phasized for initiating therapy. The em
phases thereafter for clinical management is changed to the assessment of asthma control. The level of asthma control will be used to monitor and guide all future decisions to th
erapeutic options, including maintaining or adjusting therapy. This is in sharp contrast to the previous asthma guide
line that emphasized the education and manage
ment of asthma patients who were not controlled by low-dose ICS alone to control asthma (i.e., require step 3 care or higher) should be weighed against the increased risk of severe exacerbations, although uncommon, associated with the daily use of LABAs (see discussion in text).


Dr. Stuart W. Stolff
Clinical Professor of Family & Community Medicine
University of Nevada School of Medicine
Las Vegas, NV

Member of Expert Panel Report 3
NIH/NHLBI/NAEPP Guidelines for the Diagnosis and Management of Asthma
NSF Pickwick Postdoctoral Fellowship Is Now Open

As part of its ongoing commitment to advancing sleep research, the National Sleep Foundation (NSF) is pleased to offer the NSF Pickwick Postdoctoral Fellowship and invite interested candidates to apply!

This fellowship supports researchers pursuing careers in basic, clinical, and applied sleep research.

The application deadline is November 1, 2007. Funding begins July 2008.

Since 1996, the NSF Pickwick Fellowship program has funded more than 30 young investigators who have gone on to have exemplary and thriving research careers.

We encourage you to share this information with potential candidates, colleagues, and others who may be interested.

For more information about the fellowship, visit www.sleepfoundation.org/pickwick, or contact Jessica Steinitz at jsteinitz@sleepfoundation.org. Thank you for your support!

ACS Issues 2007 Edition of Physicians as Assistants at Surgery

The American College of Surgeons (ACS) has issued the fourth edition of Physicians as Assistants at Surgery, a report developed in cooperation with 22 other surgical specialty organizations.

The report reflects the consensus opinion of the surgical specialties about whether a physician, as an assistant, is required “almost always,” “some of the time,” or “almost never” for each surgical procedure listed in the American Medical Association’s Current Procedural Terminology® (CPT) 2007.

Surgeons who are appealing claims denials for these procedures often rely on this resource. Health insurance companies also frequently refer to the report to inform reimbursement policies for assistants at surgery.

As indicated in the report, ACS maintains that health insurers should reimburse all medically necessary services.

An indication that a physician would “almost never” be needed for some procedures does not imply that a physician is never needed. ACS acknowledges that it may be necessary to use non-physicians (e.g., physician’s assistants or surgeon’s assistants with additional surgical training, registered nurses with specialized training) to assist in operations, depending on local resources and individual patient needs.

ACCUP Releases Lung Cancer Guidelines

The American College of Chest Physicians (ACCP) has released new evidence-based lung cancer guidelines in hopes that an updated series of recommendations will assist physicians in determining the best possible outcomes for their patients. Published as a supplement to the September issue of CHEST (www.chestjournal.org), the guidelines cite that there is little evidence to show lung cancer screening impacts mortality in patients, including those who are considered at high risk for the disease, and recommend against use of low-dose computed tomography (LDCT) for general screening of lung cancer.

“Even in high risk populations, current research does not show that lung cancer screening alters mortality outcomes,” said Dr. W. Michael Alberts, FCCP, co-chair of the ACCP lung cancer guidelines and Chief Medical Officer, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL. “We hope that one day we can find a useful and accurate tool for general lung cancer screening, but, at this time, the evidence does not support LDCT screening.”

Diagnosis and Management of Lung Cancer: ACCP Evidence-Based Clinical Practice Guidelines (2nd Edition) provides 260 comprehensive recommendations related to lung cancer prevention, screening, diagnosis, staging, and medical and surgical treatments. The guidelines also include new recommendations related to bronchioloalveolar carcinoma (BAC), often seen in non-smokers, and updated recommendations related to adjuvant chemotherapy after surgical resection and the diagnosis and treatment of solitary pulmonary nodules. Listed below are a few of the new recommendations.

Screening
Due to the lack of supporting evidence, the guidelines recommend against the use of LDCT, chest radiographs, or single or serial sputum cytologic evaluation for lung cancer screening in the general population, including smokers or others at high risk, except in the context of a well-designed clinical trial.

“Population screening for lung cancer is not recommended and may, ultimately, put the patient at risk for further complications,” said Dr. Gene L. Colle, FCCP, vice chair of the ACCP lung cancer guidelines and Director, Pulmonary Critical Care, and Respiratory Services, Washington Hospital Center, Washington, DC.

“Nodules are commonly found during screening; however, to determine whether they are cancerous requires additional testing, which is fairly invasive and extensive. This may cause the patient needless, both physically and psychologically.”

Bronchioloalveolar Carcinoma
For the first time, the guidelines include recommendations on the diagnosis, prognosis, and treatment of BAC. Recommendations suggest that although staging, diagnosis, and treatment are the same for BAC as for other histologic subtypes of non-small cell lung cancer (NSCLC), additional treatment options for patients achieving a diagnosis that may prove to be equivalent, if not more effective, including sublobar resection and the use of epidermal growth factor receptor-targeted agents.

Adjuvant Chemotherapy
Previous recommendations did not support postoperative chemotherapy for Stage I or Stage II NSCLC. However, the new guidelines support the use of platinum-based...
adjuvant chemotherapy for patients with completely resected Stage II NSCLC who have good performance status. The change in the recommendation was prompted by new research showing adjuvant therapy significantly reduced the risk of death in patients with Stage II NSCLC.

Solitary Pulmonary Nodules
The new recommendations outline a specific algorithm for the evaluation and management of solitary pulmonary nodules. They also stress the value of risk factor assessment, the utility of imaging tests, the need to weigh the risks and benefits of different management strategies, and the importance of obtaining patient preferences. The recommendations were rigorously developed and reviewed by 100 multidisciplinary panel members, including pulmonologists, medical oncologists, radiation oncologists, thoracic surgeons, integrative medicine specialists, oncology nurses, pathologists, health-care researchers, and epidemiologists.

The guidelines were further reviewed and approved by the ACCP Thoracic Oncology Network, the Health and Science Policy Committee, the Board of Regents, and external reviewers from the journal CHEST. The guidelines have been endorsed by the American Association for Bronchology, American Association for Thoracic Surgery American College of Surgeons Oncology Group, American Society for Therapeutic Radiology and Oncology, Asian Pacific Society of Respirology, Oncology Nurses Society, the Society of Thoracic Surgeons, and the World Association of Bronchology.

Table 3. THE-PRINCE Safety Data

<table>
<thead>
<tr>
<th>LOVENOX®</th>
<th>UFH</th>
<th>Fisher’s Exact Test (2-tailed)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=239</td>
<td>n=212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total events (DVT or PE), n (%)</td>
<td>20 (8.4)</td>
<td>22 (10.4)</td>
<td>0.015</td>
</tr>
<tr>
<td>Total events among patients with severe respiratory disease</td>
<td>9 (7.1)</td>
<td>7 (5.9)</td>
<td>NS</td>
</tr>
<tr>
<td>Bleeding complications</td>
<td>5 (1.5)</td>
<td>12 (3.6)</td>
<td>NS</td>
</tr>
<tr>
<td>Hematoma at injection site (&gt;5 cm)</td>
<td>24 (7.2)</td>
<td>42 (12.6)</td>
<td>0.027</td>
</tr>
</tbody>
</table>

NS, not significant. *Evaluable

In a Comparative Trial, LOVENOX® Had Similar Efficacy to UFH
The Thromboembolism-Prevention in Cardiac or Respiratory Disease with Enoxaparin (THE-PRINCE) study was a multicenter, controlled, randomized, open-label study of LOVENOX® against UFH for the prophylaxis of DVT and PE in 2 patient groups: patients with heart failure (333 randomized) and patients with severe respiratory disease (332 randomized). After 10±2 days of prophylaxis, there was an equivalent incidence of DVT/PE in the LOVENOX® group vs UFH (8.4% vs 10.4%, P=0.015) (Table 3). Among the patients with severe respiratory disease, the incidence of DVT/PE was 7.1% in the LOVENOX® group and 5.9% in the UFH group, a difference that was not statistically significant. Overall, there were fewer bleeding complications in the LOVENOX® group (1.5% vs 3.6% for UFH), although this difference was not statistically significant. However, there was a significantly lower incidence of injection-site hematoma in the LOVENOX® group (7.2% vs 12.6% for UFH).

Appropriate DVT/PE Prophylaxis Benefited Hospitalized Patients With Acute Respiratory Diseases Including COPD Exacerbation
Large, randomized clinical trials demonstrated that appropriate prophylaxis with LOVENOX® reduced the risk of DVT and PE in acutely ill medical patients with severely restricted mobility. LOVENOX® was as effective as UFH in this population and has advantages in safety and convenience.

LOVENOX® is indicated for the prophylaxis of DVT, which may lead to PE, in medical patients who are at risk for thromboembolic complications due to severely restricted mobility during acute illness.

IMPORTANT SAFETY INFORMATION
LOVENOX® (enoxaparin sodium injection) cannot be used interchangeably with other low-molecular-weight heparins or unfractionated heparin, as they differ in their manufacturing process, molecular weight distribution, anti-Xa and anti-IIa activities, units, and dosage. When epidural/spinal anesthesia or spinal puncture is performed, patients anticoagulated or scheduled to be anticoagulated with low-molecular-weight heparins or heparinoids are at risk of developing epidural or spinal hematoma, which can result in long-term or permanent paralysis.

The risk of these events is increased by the use of postoperative inducible epidural catheters or by the concomitant use of drugs affecting hemostasis. Patients should be frequently monitored for signs and symptoms of neurological impairment (see WARNINGS and PRECAUTIONS). As with other anticoagulants, use with extreme caution in patients with conditions that increase the risk of hemorrhage. Dosage adjustment is recommended in patients with severe renal impairment. Unless otherwise indicated, agents that may affect hemostasis should be discontinued prior to LOVENOX® therapy. Bleeding can occur at any site during LOVENOX therapy. An unexplained fall in hematocrit or blood pressure should lead to a search for a bleeding site (see WARNINGS and PRECAUTIONS).

Thrombocytopenia can occur with LOVENOX®. In patients with a history of hepatic-induced thrombocytopenia, LOVENOX® should be used with extreme caution. Thrombocytopenia of any degree should be monitored closely. If the platelet count falls below 100,000/mm³, LOVENOX® should be discontinued. Cases of hepatic-induced thrombocytopenia have been observed in clinical practice (see WARNINGS). The use of LOVENOX® has not been adequately studied for thromboprophylaxis in pregnant women or for oral anticoagulation (see WARNINGS). LOVENOX® is contraindicated in patients with hypersensitivity to enoxaparin sodium, heparin, or pork products, and in patients with active major bleeding.

Please see a brief summary of prescribing information including boxed WARNING on the next page.
November is designated as both Lung Cancer Awareness Month and COPD Awareness Month, and the ACCP urges you to participate in related activities. These national and international observances offer patients, families, physicians, and health-care advocates a wide range of opportunities to heighten awareness, stress prevention, and help improve patient care and treatment for these diseases.

World COPD Day is held on Wednesday, November 14. This year’s theme is “Breathless, Not Helpless.” The 31st Annual Great American Smokeout will be celebrated on the following day, Thursday, November 15. The daylong event was first held in 1977 and is sponsored by the American Cancer Society. Its goal is to get smokers to quit by challenging them to replace cigarette smoke with fresh air.

While these two events provide a great opportunity to get involved, remember that the lung cancer and COPD awareness campaigns last all month. The ACCP and THE CHEST Foundation have developed a series of products and resources to help you support the fight against lung cancer and COPD. To learn more, visit www.chestnet.org.

**NEWS FROM THE COLLEGE**

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**Mechanical Prophylaxis Brief Notes**

Vena cava filters are often recommended for thromboprophylaxis in patients who have been unable or unwilling to receive pharmacologic or mechanical prophylaxis, or who have contraindications to pharmacologic prophylaxis. It is important for practitioners to be aware of the indications and contraindications for vena cava filters, and to follow the guidelines for placement and follow-up. For more information, please visit the ACCP website (www.chestnet.org).

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**Thrombosis and Prevention**

Thrombosis remains a significant medical problem that affects millions of people each year. It is estimated that approximately 600,000 Americans die each year from complications of deep vein thrombosis (DVT) and pulmonary embolism (PE). In addition, it is estimated that over 2 million Americans suffer from DVT and PE each year.

The mechanisms of thrombus formation are complex and involve an interplay between hypercoagulable states and antithrombotic factors. The risk of thrombosis can be influenced by a variety of factors, including age, gender, smoking, obesity, and pre-existing medical conditions such as diabetes, cancer, and heart disease.

Prevention of thrombosis is critical, as it can reduce the risk of serious complications and improve outcomes for patients. There are several preventative measures that can be taken, including antiplatelet and anticoagulant therapy, lifestyle modifications, and mechanical prophylaxis.

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Association of RBC Transfusion With Injuries in Patients With Acute Lung Injury. By Dr. G. Netzer, FCCP, et al

Contralateral Recurrence of Primary Spontaneous Pneumothorax. By Dr. T.W. Huang, et al

Topics in Practice Management: Interfacility Transport of the Critically Ill Pediatric Patient. By Dr. S.J. Ajjazian; and Dr. T.A. Nagebawa

No Difference in Risk for Thrombocytopenia During Treatment of Pulmonary Embolism and Deep Venous Thrombosis With Either Low-Molecular-Weight Heparin or Unfractionated Heparin: A Metaanalysis. By Dr. T.A. Morris, FCCP, et al

New ACCP-SEEK Volume XVII Pulmonary Medicine

This invaluable study tool comes directly from the content blueprints for the Pulmonary Disease subspecialty board examination. The book consists of 200 case-based questions written to test your recall, interpretation, and problem-solving skills. Case-based questions feature patient histories, lab workups, and diagnostic images. Both right and wrong answers are discussed in detail.

You can earn up to 50 CME credits. To purchase the new ACCP-SEEK Volume XVII, please visit the ACCP Store online at www.chestnet.org, and click on the ACCP Store icon, located at the top right of the page.
Dr. Petty Tribute at the Making a Difference Awards Dinner

A special reception and tribute are being held in honor of Thomas L. Petty, MD, Master FCCP, at the ninth annual Making a Difference Awards Dinner on Saturday, October 20, 2007, at the Chicago Cultural Center, in Chicago.

The CHEST Foundation, and Platinum Exclusive Sponsor, Boehringer Ingelheim Pharmaceuticals, Inc., is hosting the Thomas L. Petty, MD, Master FCCP VIP Reception, which precedes the dinner.

The private reception is being attended by physicians who were trained by Dr. Petty, as well as upper level donors to the Thomas L. Petty, MD, Master FCCP Endowment in Lung Research and Making a Difference Awards Dinner sponsors at the Bronze Sponsorship level and above.

The tribute paid to Dr. Petty during the Making a Difference Awards Dinner is highlighting Dr. Petty’s dedication and accomplishments to further lung health and research and his personal interest in improving patient care.

The Thomas L. Petty, MD, Master FCCP Endowment in Lung Research is The CHEST Foundation’s way of continuing to express admiration and appreciation for Dr. Petty’s outstanding work.

Your donation to this important endowment fund will support, in perpetuity, lung research and the improvement of care for patients with respiratory diseases.

Visit The Foundation’s Web site at www.chestfoundation.org for more information on how to contribute, or contact Teri Ruiz at truiz@chestnet.org or (847) 498-8308.

Comings and Goings—CHEST Foundation Board

Six CHEST Foundation board members are rotating off the board this year and are being recognized during The CHEST Foundation’s meeting at CHEST 2007 for their exceptional support and service to The Foundation during the past 4 years.

A number of areas within The Foundation have been strengthened by the outstanding work of these Board members, and The Foundation is grateful for their commitment of time and financial resources that will enable The Foundation to build on the momentum they were so much a part of creating.

The Foundation sincerely thanks the following trustees for their service from 2003 to 2007:

- Dr. Joseph P. Lynch III, FCCP
- Dr. Praveen N. Mathur, FCCP
- Dr. Richard A. Matthay, FCCP
- COL John P. Mitchell, MC, USAF, FCCP
- Dr. M. Patricia Rivera, FCCP
- Dr. Jorge E. Sinclair Avila, FCCP

The CHEST Foundation Board of Trustees also welcomes those newly nominated:

- Dr. W. Michael Alberts, FCCP
- Dr. Vera A. DePalo, FCCP
- Dr. Naresh A. Dewan, FCCP
- Dr. Susan Harding, FCCP
- Dr. Darcy D. Marciniuk, FCCP
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CT Reading Tips Sharpen Diagnosis in Potential PE

Multidetector CT imaging is a good second test to provide more information.

BY KERRI WACHTER
Elsevier Global Medical News

WASHINGTON — CT imaging can be a useful tool to distinguish pulmonary embolism from other conditions with similar symptoms, provided you’re familiar with some of the common pitfalls, Dr. Jeffrey Carr, a professor of radiologic sciences and public health sciences at Wake Forest University, Winston-Salem, N.C., said at the annual meeting of the Society of Cardiovascular Computed Tomography.

The symptoms of pulmonary embolism (PE) are well known: a sudden onset of dyspnea, tachypnea, pleuritic chest pain, and fainting, said Dr. Carr. Unfortunately, these symptoms are often common in patients without PE.

D-dimer assays are usually the first test used to diagnose PE. D-dimer is a degradation product produced by plasmin-mediated proteases of cross-linked fibrin, which increases with thrombosis. It’s important to know whether your institution uses the latex agglutination assay or the immunosorbent assay. Dr. Carr explained, because different cut points are used with each test.

“The key thing to realize with the D-dimer is that it’s not useful in the inpatient population or for individuals that you think have an intermediate or high risk of pulmonary embolism,” said Dr. Carr. Even in a population of patients at low risk, a quarter of the tests will be negative, which means that 75% of patients in this population will have indeterminate results.

Multidetector CT imaging is a good second test to provide more information. In an April 27, 2005, meta-analysis of studies that used a CT to rule out pulmonary embolism, researchers looked at the overall clinical validity. They identified 15 studies involving 3,900 patients (JAMA 2005;293:2012-7). They found that the negative predictive value of CT angiography of the pulmonary arteries was 99.4%. The authors concluded that the clinical validity of CT imaging to rule out PE is similar to that of conventional pulmonary angiography. Of note, this meta-analysis primarily included studies using single-slice CT.

“One of the real advantages … is that CT provides an [alternative diagnosis] in a significant percentage of people who come in,” Dr. Carr said.

CT imaging is not diagnostic of PE but can rule out many other diagnoses. For example, pleural effusions and perfusion defects are common in patients without PE. Likewise, pleural effusions and perfusion defects are not diagnostic.

When a CT is viewed, it’s very important to view the vessels sequentially by folowing a blood vessel—the pulmonary artery—‘you’ll see contrast on one side or the other,’ said Dr. Carr.

Dr. Carr said another key artifact is incomplete opacification, which can pose a problem for imaging the lungs. However, the advent of multidetector-row CT has decreased the time necessary for patients to hold their breath.

Another key artifact is incomplete opacification of the pulmonary arteries. “You need to beware that you don’t have good opacification of the pulmonary arteries and mistakenly call that a pulmonary [embolus],” said Dr. Carr.

Perhaps the largest imaging pitfall for physicians just starting out is a normal lymph node within the lung, said Dr. Carr. Lymph nodes can very closely simulate clots. Lymph nodes can be distinguished by tracing the vessels: Lymph nodes will lie adjacent to vessels, not inside them.

Mucus plugs can also be tricky. The key is to follow the bronchi up and down. “Identify that it’s really a bronchus that’s occluded and not a pulmonary artery,” Dr. Carr said.

Extensive mucoid impaction can also occur. “The key thing is to remember that the bronchi and the pulmonary arteries travel together,” Dr. Carr said. Trace these together to ensure you’ve identified them correctly.

It’s also common to mistake the pulmonary vein for the pulmonary artery. Again, trace the vessels up and down. The pulmonary vein will tend to run more horizontally, “so you’ll tend to have it in plane,” said Dr. Carr.

Dr. Carr disclosed that he had no relevant conflicts of interest.
Pulmonologist/Intensivist
Join our well-regarded group of five Pulmonary/Critical Care/Sleep physicians in Billings, Montana. Colleage multispécialty group operates in up-to-date integrated hospital and clinic. Call is 1:6, shared with university trained, board certified specialists. Colleagues include strong surgical and medical sub-specialists, internists, family physicians as well as rapidly growing Hospitalist program. Near Absaroka/Beartooth Mountains and Yellowstone National Park. Family-centered and outdoor-oriented small city is the cultural and shopping center for the northern plains region. Our new associate will enjoy access to wilderness and practice tertiary care with many of the amenities but few of the hassles of a larger city. Contact: Rochelle Woods, 1-800-303-6893, physicianrecruiter@billingsclinic.org www.billionsclinic.com

Pediatric Pulmonologist
Do you have an interest in helping patients with Cystic Fibrosis and a strong passion for children? We have a growing, academic pediatric department under new leadership that is seeking a team-oriented Pediatric Pulmonologist who enjoys teaching residents and medical students. You owe it to yourself to find out more information and see if you can qualify for this position at a prestigious academic medical center in one of the most desirable locations in the Midwest. For more information, please contact: Tolise Marie Steeie, Account Executive, Adkisson Consultants, Toll Free: 888-781-1055, Fax: 309-452-7204, tolise@wvmedgroup.com

Carle Clinic Association
Carle Clinic Association, a 330-physician owned and operated multispecialty group practice, is seeking an additional BE/BC Pulmonology/Critical Care/Sleep Medicine physician to join an established department in Champaign-Urbana, Illinois. Practice includes office and hospital consultation, bronchoscopy, sleep disorders, intensive care, and pulmonary diagnostics. Position features the opportunity for academic and/or research affiliation with the University of Illinois. Champaign-Urbana has a population of 180,000 and is located two hours from Chicago and Indianapolis, and three hours from St. Louis. Please contact Dawn Goeddel at 800-436-3095, extension 4103 or via email at dawn.goeddel@carle.com

Pulmonary/Critical Care – Richmond, Virginia
Well-established group seeking BC/BE physician. 1:10 night call, 1:4 weekend daytime rounds. Considerable ICU nighttime coverage provided by EICU physician. Balanced call schedule spread amongst 20 FTE physicians. Practice includes Pulmonary, Critical Care, Sleep, Clinical Research, EICU. Sleep training great but not required. No grants to write. Teaching responsibilities not mandatory. Excellent base salary/benefits package with significant potential. No J-1 available. Position available immediately and for 2008. Contact Johnny Wong, MD. Send CV and cover letter to wongj@paraccess.com or FAX to 804-559-2357.

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We’re your connection

Pulmonary/Critical Care Opportunity Charleston, West Virginia
Join an established pulmonologist/critical care private practice group in Charleston, West Virginia.
Charleston, the state’s capitol, is a scenic, mid-size city located in a unique valley rich with historic traditions. This culturally diverse community offers all of the amenities you’d expect to find in a larger city. Whether you enjoy fine dining and symphony orchestras, or challenging golf courses, mountain biking, snow skiing and world-renowned white water rafting, this community offers something for everyone. Four distinct seasons and outstanding public and private schools make it an ideal place to raise a family.

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- Competitive salary base, benefits with rapid partnership track
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- Excellent support staff in a spacious office suite equipped with the latest technology
- Affiliated with the state’s largest medical center, Charleston Area Medical Center, with 893 beds.

- Level I Trauma Center with 16 dedicated trauma beds
- One of the top 10 heart programs in the U.S. with 18 dedicated beds
- Neurosurgical, surgical cardiac and medical intensive care units
- Opportunities for a sleep lab, PFT and stress testing
- Affiliated with WVU-Charleston Division with 140 interns and residents
- Recruitment incentives available
- Not J-1 or H-1B eligible

Carle Clinic Association
Carle Clinic Association, a 330-physician owned and operated multispecialty group practice, is seeking an additional BE/BC Pulmonology/Critical Care/Sleep Medicine physician to join an established department in Charleston, West Virginia. Call is 1:6, shared with university trained, board certified specialists. Colleagues include strong surgical and medical sub-specialists, internists, family physicians as well as rapidly growing Hospitalist program. Near Absaroka/Beartooth Mountains and Yellowstone National Park. Family-centered and outdoor-oriented small city is the cultural and shopping center for the northern plains region. Our new associate will enjoy access to wilderness and practice tertiary care with many of the amenities but few of the hassles of a larger city. Contact: Rochelle Woods, 1-800-303-6893, physicianrecruiter@billingsclinic.org www.billionsclinic.com

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Sleep Tied to Cardiovascular Risk

Sleep Duration • from page 1

The fully adjusted hazard ratios of all-cause mortality were slightly higher for those who reported sleep for 5 hours or less and 9 hours or more at the second interview, 1.78 and 1.95, respectively. The risk of death due to cardiovascular causes was relatively greater for those who slept less after the baseline period than for those who slept more.

Participants whose sleep decreased from 6-8 hours a night at the first interview had a fully adjusted hazard ratio of mortality from cardiovascular cause of 2.04, compared with 1.22 for those who slept more. Those whose sleep increased from 7-8 hours at the first interview to more than 8 hours at the second interview had a fully adjusted hazard ratio of mortality from noncardiovascular causes of 2.06, compared with 1.44 for those who slept less.

Investigators found a positive association between marital status and sleep duration. Married women were more likely to sleep longer, while married men were more likely to average 7 to 8 hours of sleep per night. Married women had a fully adjusted hazard ratio of mortality from all causes of 1.24, relative to those who slept 7 hours per night. Those who slept 9 hours or more had a fully adjusted hazard ratio of 1.54.

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By Carolyn Sachs

Maui, Hawaii—Sleep is a period of vulnerability for the respiratory system, so sleep labs are extremely helpful for dealing with respiratory disorders, Dr. Sally Ward said at a meeting sponsored by the University Children’s Medical Group and the American Academy of Pediatrics.

Dr. Ward, head of the division of pediatric pulmonology at Children’s Hospital Los Angeles, discussed ways in which polysomnography can be useful in diagnosis or treating a variety of respiratory disorders:

- Obstructive sleep apnea syndrome (OSAS). "Why bother with a polysomnogram [PSG] in a patient with big tonsils?" Dr. Ward asked. She suggested that a common assumption might be, "They’re snoring, they probably have OSAS." Why did the American Academy of Pediatrics say in its practice guidelines that children with craniofacial abnormalities, laryngomalacia, or cerebral palsy—patients who receive a diagnosis of OSAS—such as patients with cystic fibrosis—who may have hypoxemia during sleep, "the use of supplemental oxygen has been shown to increase quality of life," Dr. Ward said. "Titrating oxygen during a sleep study in the patient who may have longstanding hypoxemia will allow you to know that you’re not decreasing their hypoxic drive with a resulting increase in carbon dioxide."

- Ventilatory muscle weakness. Children with neuromuscular disease can benefit from a sleep investigation to identify hypoventilation. These are patients with "a whole host of diagnoses that can involve the respiratory muscles," Dr. Ward said, including spinal muscular atrophy, Duchenne muscular dystrophy, congenital myopathies, myotonic dystrophy, and mitochondrial disorders. They are at risk for chronic respiratory failure, which can be insidious, she said. “It can be just like a slippery slope that can go unnoticed.”

- Chronic respiratory failure. "Given the opportunity, most families in our experience will opt for assisted ventilation for their child as they enter respiratory failure," Dr. Ward said. "It behooves us to try and recognize this issue prior to a crisis, so that elective institution of ventilation can be offered." Because PSGs are very effective at identifying chronic respiratory failure, they can help in managing this transition.

Polysomnography also makes it possible to assess the adequacy of nocturnal ventilation in children who have already been identified as having chronic respiratory failure, and who are technology dependent. "Ventilatory needs are different during sleep than they are during wakefulness," she said. Once a child is on a ventilator, “using the sleep laboratory can ensure that we’re providing normal oxygenation and ventilation during sleep, which is critical to preventing complications and providing these children with good daytime function.”
NIPPV Didn’t Cut Mortality
In Acute Pulmonary Edema

BY MITCHEL L. ZOLER
Elaine Global Medical News

VIENNA — Noninvasive ventilation was safe in helping resolve symptoms in patients with acute cardiogenic pulmonary edema but the treatment was not lifesaving— it had no effect on mortality in a study with more than 1,000 patients.

“Use [noninvasive ventilation] to relieve patient suffering in the early hours of this illness, but it really only helps the patient in crisis. For the longer term, it doesn’t cause harm or benefit,” Dr. David Newby said at the annual congress of the European Society of Cardiology.

The study compared both continuous positive airway pressure (CPAP) and noninvasive intermittent positive pressure ventilation (NIPPV) against passive oxygen therapy. Both were equally safe and effective when compared with a standard regimen without high-pressure oxygen.

With 1,069 patients, the 3 Treatments for Cardiogenic Pulmonary Oedema (3CPO) trial is the first large-scale study to test the impact of high-pressure oxygen in this setting, noted Dr. Newby, a professor of cardiology at the University of Edinburgh.

The new study was done at 26 emergency departments in the United Kingdom and was sponsored by England’s National Institute for Health Services. Patients were enrolled as soon as they arrived at the hospital, and were eligible only if they had acute dyspnea and chest crepitations, were acidoic with an arterial pH of less than 7.35, and were tachypneic with more than 20 breaths per minute. They were randomized to passive oxygen, CPAP administered at an average pressure of 10 cm H2O, or NIPPV at an average pressure of 14.7 cm H2O. Therapy was applied for 2 hours. Patients were also treated with nitrates and diuretics.

Treatment with noninvasive ventilation led to small but statistically significant improvements in pulse rate, respiratory rate, and arterial pH, compared with patients in the control group (see table), but the clinical impact of these changes are unclear.

In general, however, patients who received either CPAP or NIPPV had more rapid resolution of their dyspnea and other acute symptoms, Dr. Newby said in an interview. Ventilation had no effect on the average length of hospitalization or need for intensive care.

The study’s primary end point was the mortality rate at 7 and 30 days after treatment. These rates were very similar for all three treatment groups. Seven-day mortality was 9.8% in 367 patients on standard oxygen, 9.6% for 146 patients on CPAP, and 9.4% for 356 patients on NIPPV. The 30-day mortality rates were 16.7%, 15.4%, and 15.4%, respectively.

Clinical determination of the need for or intubation was 11.7% in the control group and 11.1% among the patients on noninvasive ventilation.
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References: 1. Prolastin® Alpha-1-Proteinase Inhibitor (Human), Full Prescribing Information, January 2005. 2. Aralast® Alpha-1-Proteinase Inhibitor (Human), Full Prescribing Information, August 2005. 3. Data on file, CSL Behring LLC.