Primary Care Docs Lag In Quality of HF Care

ARTICLES BY SHERRY BOSCHERT
San Francisco Bureau

SEATTLE — Cardiologists outperformed internists, family physicians, and other specialists in meeting the measures of care for hospitalized patients with heart failure prescribed by the Joint Commission on Accreditation of Healthcare Organizations, Kismet D. Rasmusson reported.

A study of care within the 20-hospital Intermountain Healthcare system, which handled 2,000 admissions for a primary diagnosis of heart failure in 2005, assessed documentation of three aspects of care mandated by the Joint Commission (JCAHO) for evidence-based care of heart failure. Intermountain Healthcare employs about 400 physicians, mainly in primary care, and is affiliated with 2,500 more physicians, mainly specialists.

Results showed that internists cared for 31% of patients admitted for the first time with a primary diagnosis of heart failure during 2002-2006. Family physicians handled 19%, cardiologists or thoracic surgeons provided 22% of care, and other specialists handled the remainder of care for heart failure, she and her associates reported in a poster presentation.

Overall, 62% of cardiologists documented compliance with all three measures of heart failure care, compared with 43% of noncardiologists, said Ms. Rasmusson, a family nurse practitioner at LDS Hospital, Salt Lake City.

Noncardiologists were more likely to comply with only one, two, or none of the measures, documentation suggested.

The JCAHO requires documentation of four steps in caring for hospitalized heart failure patients:

1. Measurement of left ventricular function in the past, or planned measurement after discharge.

2. Prescription of an ACE inhibitor or an angiotensin receptor blocker when the left ventricular ejection fraction is 40% or lower, unless the drugs are contraindicated.

3. Providing self-management education to patients.

4. Providing smoking cessation counseling (the study did not include this measure because of the low numbers of smokers).

Previous studies have shown that compliance with these measures is associated with improved patient outcomes. "Health systems need to either increase the numbers of cardiologists providing heart failure care or improve care provided by noncardiologists," the investigators concluded. ■

Maximize Cardiac Meds to Treat Concomitant Sleep Apnea

SEATTLE — Maximizing heart failure therapy helps treat concomitant sleep apnea, Dr. David P. White said at the annual meeting of the Heart Failure Society of America.

Beyond that, treatment for sleep apnea in patients with heart failure relies mainly on continuous positive airway pressure (CPAP), which can regularize disordered breathing and which may improve ejection fraction and quality of life. There are no randomized trial data, however, showing that treating sleep apnea in patients with heart failure decreases mortality or the need for heart transplant, added Dr. White, professor of medicine at Harvard University, Boston.

The most common type of disordered breathing in heart failure patients is Cheyne-Stokes respiration, a variant of central sleep apnea. A number of short, single-center trials suggested that CPAP in patients with heart failure and either central or obstructive sleep apnea could stabilize respiration, improve cardiac function and quality of life, and perhaps reduce the need for cardiac transplantation.

The only randomized, placebo-controlled trial, however, looked at CPAP for patients with heart failure and Cheyne-Stokes respiration and found no difference in quality of life, mortality, or the need for transplant. In the Canadian Positive Airway Pressure trial, CPAP did produce a mean 3% improvement in ejection fraction (not the 8% found in single-center studies), improved oxygenation, and led to a small increase in 6-minute walk distances (N. Engl. J. Med. 2005;353:2025-41).

"First, always maximize the cardiac medications," Dr. White urged. Studies show that the severity of heart failure predicts, to some degree, the extent of disordered breathing. The severity of Cheyne-Stokes respiration predicts survival rates independently of the severity of heart failure, he added. Other studies suggest that resynchronization therapy also can reduce the severity of disordered breathing, though not in all patients.

After that, consider CPAP for heart failure patients with central sleep apnea, or possibly one of several new devices designed specifically to relieve Cheyne-Stokes respiration, he said. The devices do regularize breathing but there are no long-term studies of their effects on survival, quality of life, or other parameters.

Dr. White is chief medical officer of a company that makes a variety of devices to treat sleep apnea, and is a consultant to other companies with apnea treatments. ■

All Heart Failure Patients Should Be Screened for Sleep Apnea, Expert Says

SEATTLE — There is no standard way to screen for sleep apnea in patients with heart failure, but there are several screening models to choose from, Dr. Steven M. Scharf said at the annual meeting of the Heart Failure Society of America.

Sleep apnea commonly accompanies heart failure, and can be treated, though there's little high-quality evidence that treatment alters mortality or quality of life. Still, "I think you certainly should screen all your heart failure patients," said Dr. Scharf, professor of medicine and director of the sleep disorders lab at the University of Maryland, Baltimore.

Patients with symptoms in two of the three Berlin Questionnaire categories are at high risk for apnea.

DR. SCHARF

One good screening tool is the Berlin Questionnaire, which asks about symptoms in three categories: excessive sleepiness or sleepiness while driving; wild, disturbing snoring or gasping; and either obesity or heart failure (Ann. Intern. Med. 1999;131:485-91). Primary care patients with symptoms in two of the three categories are at high risk of obstructive sleep apnea, but the sensitivity and specificity of the questionnaire in patients with heart failure are unknown, he said.

Other screening schemes stratify patients by neck circumference, with larger necks increasing sleep apnea risk (N. Engl. J. Med. 2002;347:498-91). Other scoring systems combine clinical findings such as male gender, body mass index, a snoring index, and a choking index to rate the likelihood of sleep apnea. Many of these screening models may be useful, Dr. Scharf suggested. (See article at right for another screening tool).

If a heart failure patient seems to have a high probability of sleep apnea (perhaps based on the Berlin Questionnaire and neck circumference), schedule a full polysomnograph evaluation, he advised. Consider doing overnight pulse oximetry testing in heart failure patients who don't meet your threshold for high risk of apnea, he added. A recent metaanalysis of 79 studies that used pulse oximetry for screening suggests that if you have a strong clinical suspicion for obstructive sleep apnea and testing shows fewer than 15 desaturations per hour, diagnostic polysomnography may be warranted (Chest 2001;120:625-33). With more than 15 desaturations per hour, a full evaluation for sleep apnea or treatment with titrated continuous positive airway pressure may be reasonable.

Two articles suggest that an algorithm assessing heart rate variability might help screen for apnea in heart failure patients, but practice parameters don't exist and would need to be developed, he said (Eur. Respir. J. 2006;27:571-7). One small study suggests the PAT100 Watch, which measures peripheral arterial tone, also might help screen for sleep apnea.

Dr. Scharf has no affiliation with companies that sell the tools he discussed. ■

Simple Screening Tool Detects Sleep Apnea in Heart Patients

SEATTLE — Patients with heart failure or hypertension who answered "Yes" to at least two of three questions had a high likelihood of having obstructive sleep apnea, Cheryl L. Bartone reported in a poster presentation at the annual meeting of the Heart Failure Society of America.

She and associates compared responses to the screening questionnaire with polysomnography results in 70 outpatients with heart failure or hypertension seen at a cardiology office.

The three-question screening tool was 90% sensitive and 45% specific in detecting obstructive sleep apnea, said Ms. Bartone of the Ohio Heart and Vascular Center, Cincinnati.

The tool had a positive predictive value of 67% and a negative predictive value of 78%.

Patients were asked:

- Do you snore loudly?
- Do you wake up more than once a night?
- Do you have morning fatigue?

Polysomnograms showed that 67 patients had some degree of obstructive sleep apnea, defined as an apnea-hypopnea index of 5 or greater. The obstructive sleep apnea was considered significant in 39 patients who had moderate or severe obstructive sleep apnea, defined as an apnea-hypopnea index of 20 or greater.

Of the 52 patients who answered "Yes" to at least two questions, 32 had significant obstructive sleep apnea. Among the 18 patients who answered "Yes" to only one or none of the questions, 4 had significant obstructive sleep apnea.

Patients with significant obstructive sleep apnea were more likely to be on β-blockers than were those without significant obstructive sleep apnea (82% vs. 74%) and less likely to be on an ACE inhibitor or angiotensin receptor blocker (74% vs. 77%).

Obstructive sleep apnea is a significant contributor to morbidity and mortality in patients with heart failure or hypertension, the investigators said.

There is no other easily applicable screening tool for effective detection of obstructive sleep apnea in these patients, they added. The investigators have no financial conflicts of interest in the study.

The groups with and without significant obstructive sleep apnea did not differ by age, sex, left ventricular ejection fraction, weight, body mass index, or morning fatigue. ■