## Apnea in Pregnancy Could Pose Threat to Fetus

BY BRUCE JANCIN

Denver Bureau

Denver — Obstructive sleep apnea is far more common during pregnancy than most physicians realize and in its more severe forms can jeopardize the fetus, Meir H. Kryger, M.D., said at a satellite symposium held in conjunction with the annual meeting of the Associated Professional Sleep Societies.

"I've had cases of sleep apnea in pregnant women who actually before diagnosis had several spontaneous abortions. I have no doubt that in some cases the baby was lost when it became very, very hypoxic," added Dr. Kryger, professor of medicine and director of the sleep disorders center at the University of Manitoba, Winnipeg.

The treatment for obstructive sleep apnea in pregnancy is continuous positive airway pressure (CPAP). It's considered safe for both mother and fetus.

The prevalence of habitual snoring—that is, snoring nearly every night—climbs from 4% in nonpregnant women to 14%-23% during pregnancy. The increase during pregnancy is believed to be due to weight gain coupled with hormonally induced changes in the elasticity of the pharyngeal airway and other tissues.

"Sleep apnea is actually quite common in pregnant women. I don't know why more doctors don't pick it up," Dr. Kryger said. He advises routinely performing polysomnography in pregnant heavy snorers (especially if they are also observed to stop breathing), treating with CPAP those who meet the criteria for obstructive sleep apnea, and repeating the sleep lab testing post partum. The reason he advocates an

aggressive approach is the documented adverse effects of heavy snoring in pregnancy. He pointed to a Swedish study conducted several years ago that highlighted the implications of heavy snoring during pregnancy.

The study by Karl A. Franklin, M.D., Ph.D., a pulmonologist at University Hospital, Umeå, and his colleagues involved 113 habitual snor-

ers and 289 infrequent or nonsnorers. All had singleton pregnancies. On their delivery day, they and their partners completed a detailed questionnaire focusing on snoring, daytime tiredness, and witnessed sleep apneas.

Habitual snoring proved to be associated with significantly higher rates of preeclampsia, new-onset hypertension, fa-

cial edema, and edema at other sites. Heavy snoring was also associated with significantly higher rates of babies who were small for their gestational age and of low 1- and 5-minute Apgar scores.

"One of the really important things to



Dr. Meir H. Kryger, of the University of Manitoba, Winnipeg, said sleep apnea in pregnant women is quite common.

remember is that if a woman has sleep apnea and she delivers a baby, she's going to be very, very sleepy and will have a great deal of difficulty caring for a newborn," Dr. Kryger said. In fact, this sleep disturbance and the resultant feelings of maternal inadequacy because of profound fatigue can prove a factor in postpartum depression, the most common complica-

tion of childbearing, Dr. Kryger said.

The Swedish study is one of several that have identified obesity as the major risk factor for sleep apnea in pregnancy. Habitual snorers in pregnancy were considerably heavier before pregnancy and gained more weight during pregnancy than did the infrequent snorers.

The link between habitual snoring and pregnancy-induced hypertension reported by Dr. Franklin and his coworkers has also been found by others. Preeclampsia has been associated not only with upper airway narrowing, snoring, and frequent arousals from sleep, but also with restless legs syndrome and other periodic limb movements. "A pregnant woman who develops hypertension or protein in the urine may need to have a sleep evaluation," Dr. Kryger said.

The good news, only recently documented, is that sleep-disordered breathing arising in late pregnancy often improves following parturition, according to Dr. Kryger, who pointed to a study by Natalie Edwards, Ph.D., and her colleagues at the University of Sydney (Australia). In 10 women referred for sleep-disordered breathing in the third trimester, significant improvements were found in the apneahypopnea index, and minimum arterial oxyhemoglobin saturation occurred in all 10 postnatally (Sleep 2005;28:737-41). Peak arterial blood pressure responses to apnea also dropped markedly.

## Brief Depression Screen May Improve Cardiac Outcomes

BY DIANA MAHONEY

New England Bureau

NEW ORLEANS — A brief, two-question screening instrument is sensitive for identifying depression in patients with coronary heart disease, a study has shown.

Because major depression is associated with adverse outcomes in this patient population, the availability of a quick, effective tool for improving detection and referral rates could improve patient outcomes substantially, David D. McManus, M.D., reported at the annual meeting of the Society of General Internal Medicine.

Using data from the Heart and Soul Study of the University of California, San Francisco, Dr. McManus and his colleagues compared the test characteristics of four depression case-finding instruments with those of the Diagnostic Interview for Depression in 1,024 adults with stable coronary heart disease (CHD) recruited from local outpatient clinics.

The instruments selected for comparison were the 10-item short form of the Center for Epidemiologic Studies Depression Scale (CES-D), the 9-item Patient Health Questionnaire (PHQ-9), the 2-item Patient Health Questionnaire (PHQ-2), and a brief screen that asks patients about depressed mood and anhedonia.

Specifically, the brief screen asks patients, "During the past month, have you

often been bothered by feeling down, depressed, or hopeless?" and "During the past month, have you often been bothered by little interest or pleasure in doing things?" Dr. McManus said. An answer of "yes" to either of these questions was considered a positive screen.

Of the 1,024 study participants, 224 had major depression by standard measure (Diagnostic Interview for Depression). The brief, two-question screen was, at 90%, the most sensitive of the four test measures. The sensitivity of the CES-D, the PHQ-9, and the PHQ-2 was 76%, 54%, and 39%, respectively. The specificity of the brief screen was 69%, compared with 79%, 90%, and 92% for the CES-D, the PHQ-9, and the PHQ-2.

"The two-question instrument was a sensitive tool for identifying depression in CHD patients from diverse outpatient care settings," Dr. McManus said.

The instrument can be easily integrated into outpatient visits, "even in the busiest cardiology practices," he said. "A negative response to both questions effectively rules out depression, and a positive response to either suggests the patient might benefit from referral or treatment."

The Heart and Soul Study is an ongoing, prospective cohort study designed to determine how psychosocial factors influence disease progression in patients with CHD

## Treating Patients' Physical Symptoms May Improve Depression Severity

BY DAMIAN MCNAMARA

Miami Bureau

BOCA RATON, FLA. — Targeting physical symptoms of depression in a primary care setting increases the likelihood of treatment response, according to a multicenter, naturalistic study.

Somatic symptoms of depression are getting increased attention as part of a drive to achieve and sustain asymptomatic remission, according to Sidney H. Kennedy, M.D. He and his associates hypothesized that alleviation of the physical symptoms of depression would improve response and remission rates.

They assessed 205 patients undergoing open-label antidepressant treatment for 8 weeks in 47 primary care settings across Canada. Patients were receiving venlafaxine, citalopram, fluoxetine, paroxetine, sertraline, bupropion, or mirtazapine. Mean patient age was 43 years, and 64% were female; 157 patients completed the study.

At baseline, and every 2 weeks thereafter, researchers compiled an aggregate somatic score for each patient based on eight items culled from the Hamilton Depression Rating Scale (HAMD). This shorter instrument (HAMD-S) assessed gastrointestinal somatic symptoms; weight loss; early, middle, and late insomnia; general somatic symptoms; somatic anxiety; and hypochondriasis.

Two other scales—the Montgomery

Asberg Depression Rating Scale (MADRS) and the Clinical Global Impression Scale for Improvement and Severity of Illness—were used to measure depression severity.

Results were presented during a poster session at a meeting of the New Clinical Drug Evaluation Unit sponsored by the National Institute of Mental Health.

HAMD-S scores decreased from a mean of 10 at baseline to a mean of 3 at week 8, a statistically significant difference. There was a significant correlation between improvements on the HAMD-S and overall reductions in MADRS total score, response score, and remission score. Both HAMD-S and MADRS findings correlated with Clinical Global Impression Scale findings.

"The bottom line is we showed that physical symptoms responded comparably with the other symptoms," said Dr. Kennedy, a psychiatrist with the University Health Network, Toronto.

The HAMD-S and MADRS scales, however, have not been validated as somatic subscales, he cautioned. This is a possible limitation of the study.

Clinicians should target somatic symptoms of depression to improve treatment outcomes, Dr. Kennedy said.

The study was supported by funding from Wyeth Pharmaceuticals. Dr. Kennedy is a consultant and speaker for the company.