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. "[Physicians], I think, need to learn a great deal more about sleep and its problems."

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 postpartum.

The reason Dr. Kryger 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 coworkers involved 113 habitual snorers 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, facial 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 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 due to profound fatigue can be a factor in postpartum depression, the most common complication of childbearing, he continued.

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.

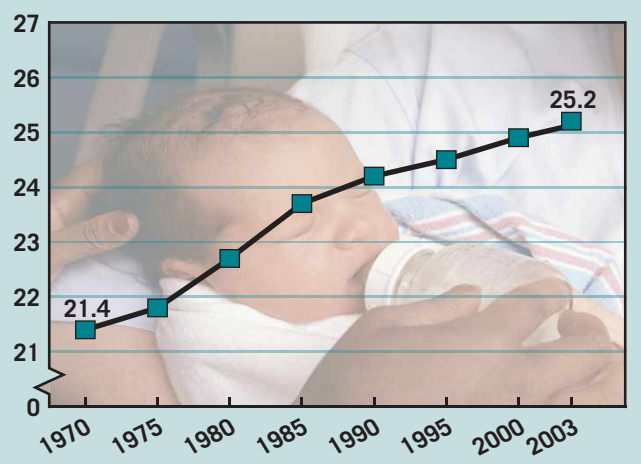
"A pregnant woman who develops hypertension or protein in the urine may need to have a sleep evaluation. She may have either asymptomatic snoring or something more serious," Dr. Kryger said.

The good news, only recently documented for the first time, 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 coworkers at the University of Sydney (Australia).

In 10 women referred for sleep-disordered breathing in the third trimester, the investigators found that significant improvements in the apnea-hypopnea index and minimum arterial oxyhemoglobin saturation occurred in all 10 postnatally. Peak arterial blood pressure responses to apnea also dropped markedly (Sleep 2005;28:737-41). ■

DATA WATCH

Mean Age of Mother at Birth of First Child Rose 18% Since 1970



Source: Centers for Disease Control and Prevention

KEVIN FOLEY, RESEARCH

CLINICAL CAPSULES

Liver Tumors From Breast Cancer

The liver is a common site of breast cancer metastases, and surgically aggressive approaches—which can include resection, radiofrequency ablation, or a combination of the two—appear to provide a survival benefit, according to Steven Curley, M.D.

Depending on the location of the tumor, resection can be difficult. Radiofrequency ablation (RFA), by itself or along with resection, has been used as a successful alternative to resection alone for these difficult tumors, said Dr. Curley of M.D. Anderson Cancer Center, Houston.

A review of M.D. Anderson cases showed that of nearly 1,400 patients treated for liver cancers, only 362 patients had noncolorectal metastases, and of these, 62 (17%) had breast cancer metastases, he said.

Of the 62 patients with breast cancer metastases, 41 underwent resection only, 11 underwent RFA only, and 10 had combined resection and RFA. At a median follow-up of 30 months, 27 patients were alive with no evidence of disease, and of 35 with recurrent disease, 10 had died. The actuarial overall survival rate was 47%.

Pregnancy GBS Screening Disparities

Hispanic women and those who received prenatal care at a hospital or clinic were less likely to be screened for group B streptococcus in North Carolina during 2002-2003, the Centers for Disease Control and Prevention reported.

In 2002, the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists jointly recommended universal prenatal screening for vaginal and rectal group B streptococcus (GBS) colonization at 35-37 weeks' gestation.

The same year, the CDC began analyzing GBS screening rates in the North Carolina Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based monthly mail/telephone survey of randomly selected women in the state who had recently given birth to a live-born infant.

The data comprise responses from 3,027 women who were included in the sample. In 2002, 70% reported having been tested for GBS during their most recent pregnancy, 11% said they had not been tested, and 19% did not know whether they had been tested. In 2003, those proportions were 74%, 8%, and 18%, respectively, the CDC reported (MMWR 2005;54:700-3).

Among the women who knew their GBS status, the factors significantly associated with lack of prenatal screening on multivariate analysis were Hispanic ethnicity, receipt of prenatal care primarily at a hospital clinic or health department (versus private physician/HMO), and lack of prenatal HIV testing.

Obesity Linked to Infant Clefts

Obese women are 30% more likely than women of normal weight to give birth to an infant with an orofacial cleft, Swedish investigators reported.

"One possible explanation is undetected type 2 diabetes. Obese women, in the absence of overt diabetes, have been found to have an impaired glucose metabolism, which may be associated with an increased risk for orofacial clefts," they said.

Another possible explanation could be deficient folic acid intake in early pregnancy, wrote Marie Cedergren, M.D., of the University of Linköping, and her coinvestigator, Bengt Kallen, M.D., of Tornblad Institute at the University of Lund (Cleft Palate Craniofac. J. 2005;42:367-71).

The investigators examined the association between maternal body mass index and orofacial clefting in almost 1 million infants born in Sweden from 1992 to 2001. Women with a body mass index of at least 29 kg/m^2 were considered obese.

A total of 1,686 infants were born with orofacial clefts.

Compared with infants born of normal-weight mothers, infants of obese mothers had a 28% higher risk for cleft palate, 14% for cleft lip, and 31% for both abnormalities.

Intrahepatic Cholestasis of Pregnancy

Pruritus was reduced more effectively in patients with intrahepatic cholestasis of pregnancy after treatment with ursodeoxycholic acid, compared with those treated with cholestyramine, according to a randomized study of 84 symptomatic patients in Lithuania.

Jurate Kondrackiene of Kaunas (Lithuania) University of Medicine and colleagues found that ursodeoxycholic acid (UDCA; 8-10 mg/kg body weight daily) outperformed cholestyramine (8 g daily) in reducing the pruritus that characterizes ICP (Gastroenterology 2005;129:894-901).

Pruritus scores were reduced by 66.6% and 19.0%, respectively, with UDCA and cholestyramine; likewise, levels of serum aminotransferases and serum bile acids were markedly reduced by 78.5% and 73.8%, respectively, after treatment with UDCA, but by only 21.4% each after cholestyramine.

The study results confirm that UDCA should be used as first-line therapy for ICP, the researchers stated.

—From staff reports