Sleep Loss Tied to Adverse Perinatal Outcomes

BY SUSAN LONDON

SEATTLE — Sleep disturbances during pregnancy increase the risk of adverse perinatal outcomes, such as gestational diabetes and cesarean delivery, according to an overview of research presented at the annual meeting of the Associated Professional Sleep Societies.

"Sleep disturbances are common during pregnancy," said Bilgay Izci Balserak, Ph.D., of the University of Glasgow (Scotland) Sleep Centre. "The majority of pregnant women experience some level of sleep disturbance, especially in the third trimester of pregnancy."

A 2007 poll conducted by the National Sleep Foundation found that 84% of pregnant women reported experiencing sleep problems at least a few nights per week, she noted. This compared with 67% of all women surveyed.

'Early recognition, management, and treatment of sleep disturbances [may] prevent adverse perinatal outcomes.'

DR. BALSERAK

Altered sleep during pregnancy stems from a variety of hormonal, physiologic, and psychological factors, according to Dr. Balserak. These factors can affect sleep directly, as in the case of progesterone causing sedation, or indirectly, as in the case of heartburn or nocturia causing awakenings.

The sleep disturbances seen during pregnancy include both nocturnal perturbations (poor sleep quality, insomnia, and frequent awakenings) and daytime symptoms (fatigue and daytime sleepiness), she noted.

Pregnancy-related changes can trigger frank sleep disorders or exacerbate preexisting ones, such as restless legs syndrome, sleep-disordered breathing, and parasomnias.

The acute sleep loss or fragmented sleep that results from sleep disturbances "can cause adverse perinatal outcomes," she said. Retrospective and prospective studies, for example, have shown that pregnant women with sleep-disordered breathing have a two- to fivefold increased risk of developing gestational diabetes after body mass index is taken into account (Am. J. Respir. Crit. Care Med. 2007;175:A996; Sleep 2009;32:A320-1).

Other research has linked sleep disturbances to birth outcomes. For instance, compared with women with a total sleep time of at least 7 hours in late pregnancy, women with a total sleep time of less than 6 hours or 6-6.9 hours have sharply elevated odds of cesarean delivery (odds ratios, 4.5 and 3.7, respectively) (Am. J. Obstet. Gynecol. 2004; 191:2041-6). Women sleeping less than 6 hours also have longer labor, on average, than those sleeping at least 7 hours (29 vs. 18 hours).

Studies have found correlations between unfavorable sleep parameters in late pregnancy and elevated levels of depressive symptoms, both at that time and in the early postpartum period.

"Early recognition, management, and treatment of sleep disturbances are important to prevent adverse perinatal outcomes," Dr. Balserak said. However, she added, there are currently no practice parameters when it comes to screening for and managing sleep disturbances during pregnancy.

"Regarding management, nonpharmacologic interventions should be considered as the first choice, including lifestyle modifications and cognitive behavioral therapy strategies," she recommended.

Clinicians should encourage women to adopt healthy lifestyle behaviors, such as daily exercise, that may improve sleep, Dr. Balserak said. And they should counsel women about measures to address specific symptoms disrupting sleep, such as modifying eating habits to reduce heartburn.

"If pharmacological treatment is necessary, it should be used with caution due to potential side effects on the fetus," she concluded.

Dr. Balserak reported that she had no conflicts of interest in association with her presentation. ■