Summaries for Patients

Risk for Death From Cardiovascular Disease in Women With Obstructive Sleep Apnea

What is the problem and what is known about it so far?
Obstructive sleep apnea (OSA) is a common medical problem that involves temporary interruptions of airflow while sleeping. Typical symptoms of OSA include snoring; pauses in the patient’s breathing while asleep, as witnessed by others; and excessive sleepiness during the daytime. It may be treated by wearing a mask that gently blows air into the nose or mouth to prevent the interruption of airflow while sleeping, a treatment called continuous positive airway pressure (CPAP). In addition to daytime fatigue and other health problems, OSA is known to increase the risk for death in men due to cardiovascular problems (such as heart attacks). Treatment with CPAP can reduce that risk. Much less is known about the risk of OSA to women.

Why did the researchers do this particular study?
To find out whether women with OSA are at an increased risk for death due to cardiovascular problems and whether CPAP therapy is associated with a decreased risk.

Who was studied?
1116 women sent by their physicians to sleep medicine treatment clinics in Spain.

How was the study done?
All the women underwent a study while they slept to determine whether they had OSA. If they did and the disease was severe or they had symptoms caused by OSA, they were prescribed CPAP therapy. The researchers evaluated a database in which information on these women had been collected between 1998 and 2007 to see whether the presence of OSA was associated with death due to a cardiovascular problem (such as stroke, heart attack, or heart failure) and whether the use of CPAP was associated with a diminished risk.

What did the researchers find?
Deaths due to cardiovascular problems were more frequent in women who had OSA that was not treated with CPAP, particularly when the OSA was severe. The rate of deaths from cardiovascular problems in women with severe OSA who used CPAP therapy was not increased compared with women who had no OSA.

What were the limitations of the study?
This was an observational study, not a clinical trial. The study cannot tell whether OSA caused the increased rates of death observed, or whether the risk was reduced by CPAP therapy rather than other factors that might be associated with OSA or use of CPAP.

What are the implications of the study?
The study supports the notion that OSA is a risk for death due to cardiovascular problems in women, as has been shown in men. More research and greater attention to OSA in women is warranted.