



Snooze e-News!

May 22, 2006

News about the Snooze!

This email contains links to articles related to sleep disorders from various websites from the past. For more information on the articles click on the links provided. Please note: News websites may withdraw their articles at any time and archive it on their site.

Left Ventricular Structural Adaptations to Obstructive Sleep Apnea in Dilated Cardiomyopathy

In a recent study performed by top researchers in Canada on heart failure patients with nonischemic dilated cardiomyopathy, the presence of obstructive sleep apnea is associated with an increased prevalence of left ventricular hypertrophy. The higher relative wall thickness and interventricular septal thickness in patients with obstructive sleep apnea indicate that the left ventricle is relatively less eccentric than in patients without obstructive sleep apnea, and that such remodeling affects mainly the septum. These structural adaptations may reflect unique nocturnal mechanical and adrenergic stimuli associated with obstructive sleep apnea. <http://ajrcm.atsjournals.org/cgi/content/abstract/173/10/1170>

Ramelteon Shows Potential for Circadian Phase Shifting

Results from a new study to further explore the mechanistic action of ramelteon suggest it may have the ability to shift the biological circadian rhythm – one's natural 24-hour sleep-wake cycle – based on a study model designed to examine this potential. Ramelteon has a unique mechanism of action that selectively targets two receptors located in the brain's suprachiasmatic nucleus (SCN). The SCN is known as the body's "master clock" because it regulates 24-hour, or circadian rhythms, including the sleep-wake cycle. According to the study, patients who received ramelteon before they went to bed five hours earlier than their normal bed time experienced an advancement of dim light melatonin secretion offset compared to placebo, a model used to evaluate a circadian phase-shifting effect. Eight hours after lights out, patients were awakened, and melatonin levels were measured every 60 minutes for 10 hours. It was found that ramelteon (1 mg, 2 mg, and 4 mg) produced a significantly greater and more rapid circadian phase advance compared to placebo (P=0.002, P=0.003 and P=0.001, respectively), as indicated by endogenous melatonin secretion offset time. Although circadian phase advance was also more rapid and greater with ramelteon 8 mg, the difference did not achieve statistical significance in this study. Additionally, the safety profile of ramelteon across all dosages was similar to that of placebo.

<http://www.newswise.com/p/articles/view/520705/>

Researchers Look To The Brain To Explain Gender Differences In Sleep Apnea

A University of Wisconsin research team has theorized that either the caudal raphe or the hypoglossal nucleus -- or both together -- play roles in sleep apnea. The purpose of the Barker study is to determine if the difference in estrogen levels between men and women plays a role in serotonin expression in the caudal raphe and hypoglossal nucleus -- leading to a difference in tongue control. The researchers hypothesized that females would have greater numbers of serotonin-activated neurons running between the hypoglossal nucleus and the tongue. The study suggests the caudal raphe does not play a role -- at least by itself -- in obstructive sleep apnea. Researchers will next look at the neurons producing serotonin that run from the hypoglossal nucleus to the tongue, explained Barker. Also in the future: a look at the interactions among the caudal raphe, the hypoglossal nucleus and the tongue. The key may be in how these structures interact, she said. If this line of research eventually pans out, it may be possible to adjust hormone levels to relieve the sleep apnea and avoid the resultant health problems, Barker said. <http://www.medicalnewstoday.com/medicalnews.php?newsid=40979#>

New AHA Guidelines Link Sleep Apnea and Stroke Risk

Patients whose stroke risk might be lowered if their sleep apnea were detected and treated include those with abdominal obesity and drug-resistant hypertension, said Larry B. Goldstein, M.D., of Duke. Dr. Goldstein was senior author of the guidelines, which were published online in *Stroke, Journal of the American Heart Association*.

"Primary Prevention of ischemic stroke. A guideline from the American Heart Association/American Stroke Association stroke council." *Stroke*. Advanced online publication May 5, 2006. Note that the updated AHA stroke prevention guidelines are available at <http://stroke.ahajournals.org/cgi/reprint/strokeaha;37/3/753>