

AU InforMed

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National Sleep Awareness Week

March 5-11, 2007



NEW DRUG INFORMATION and other related stuff...

Ramelteon (Rozerem[®]), the newest prescription sleep aid, works on melatonin receptors. This action is different from other common sleep medications like zolpidem (Ambien[®]) or eszopiclone (Lunesta[®]) which work primarily on GABA receptors. Due to the lack of addictive properties with ramelteon, it is not controlled like zolpidem, eszopiclone, and zaleplon (Sonata[®]). Patients should be instructed to take ramelteon within 30 minutes of bedtime, which is the estimated time to onset of action. Alcohol should be avoided due to the possibility of increased sedation. Studies have shown the drug to be efficacious in reducing average sleep latency to persistent sleep. For more information about this drug, refer to the package insert at <http://www.rozerem.com/images/pi.pdf> [Rozerem[®] (ramelteon) Takeda Pharmaceuticals American, Deerfield, IL, April 2006]

FDA Warns Consumers about Tainted Online Medications... FDA alerted consumers who have purchased zolpidem (Ambien[®]), alprazolam (Xanax[®]), escitalopram (Lexapro[®]), or lorazepam (Ativan[®]) online that the product may contain haloperidol. No specific online vendors were mentioned, however, the medication was postmarked in Greece. They have reported several cases of patients requiring treatment for difficulty breathing, muscle spasms, and muscle stiffness. A renewed emphasis on the potential dangers of buying medications online was issued in a statement by the FDA. For more information on this alert, visit the FDA's website at FDA alerts consumers to unsafe, misrepresented drugs purchased over the internet. *FDA News*. 2007 Feb 16; P07-22. <http://www.fda.gov/bbs/topics/NEWS/2007/NEW01564.html>

INFORbits on SLEEP DISORDERS...

Insomnia... Symptoms include trouble falling asleep, waking up a lot during the night with trouble returning to sleep, waking up too early in the morning, and not feeling well rested after a full 7-8 hours of sleep. Insomnia is estimated to affect around 30% of the population over the course of a year. Acute insomnia is defined as lasting from one night to a few weeks; chronic insomnia is defined as insomnia at least three nights a week for a month or longer. Patients are evaluated for insomnia based upon self-report of symptoms. Acute insomnia usually does not require pharmacological therapy. Treatment options include prescription sleep aids and improved

sleep hygiene (see “Tips on Catching Some ZZZs”, below). Visit http://www.njsleepdisorderscenter.com/sleep_quiz.htm to assess whether you have any signs and symptoms of a major sleep disorder. More information can be obtained at http://www.emedicinehealth.com/insomnia/article_em.htm (WebMD, Inc. c2007) Summers MO, Crisostomo MI, Stepanski EJ. Recent developments in the classification, evaluation, and treatment of insomnia. *Chest*. 2006 Jul;130(1): 276-286

Narcolepsy... Narcolepsy is a chronic neurological disorder caused by the brain’s inability to regulate sleep-wake cycles normally and affects less than 1% of the population. It is characterized by daytime drowsiness and involuntary sleep episodes. These sleep episodes can last anywhere from a few seconds to an hour. There is not yet a cure but symptoms can be controlled with drug therapy, such as amphetamines and antidepressants. To increase your knowledge about narcolepsy, see this web site.

<http://www.ninds.nih.gov/disorders/narcolepsy/narcolepsy.htm>

National Institute of Neurological Disorders and Stroke. NINDS narcolepsy information page. Last updated February 14, 2007.

Sleep apnea... Obstructive sleep apnea is the most common type of sleep apnea and is caused by a blockage of the airway by the soft tissue in the rear of the throat. Sleep apnea is estimated to affect between 2-4% of the population. Overweight patients have a higher incidence of sleep apnea because there is more pressure on the throat leading to a narrowing of the airway. Overnight evaluation in a sleep lab is needed for diagnosis. Patients with untreated sleep apnea stop breathing several times during the night which leads to poor sleep quality. Sleep apnea has been associated with high blood pressure, memory problems, weight gain, impotency, headaches, job impairment, and car accidents. Treatment options include continuous positive airway pressure (CPAP) and surgery. For more information, go to American Sleep Apnea Association, 2007. <http://www.sleepapnea.org/>

Snoring... Snoring is caused by an obstruction to the free flow of air through the back of the mouth and nose. It occurs more commonly in males and overweight patients. Prevalence of snoring has been estimated to be as high as 45%. Snoring can disturb sleep patterns of the patient (and anyone else in the room) and can lead to sleep apnea. CPAP and surgery are therapeutic options to help snoring. Some patients have found relief using nasal strips which are available at most retailers. Patients can also try avoiding alcohol or eating 3-4 hours before bedtime, avoiding sleeping pills, sleeping on their side, inclining the head of the bed, and losing weight. More information on snoring can be found at



<http://www.entnet.org/healthinfo/snoring/snoring.cfm>

American Academy of Otolaryngology-Head and Neck Surgery c2007

FROM THE MEDICAL LITERATURE...

Sleep and ADHD ... A recent study published in *Sleep* looked at sleep-related problems and how they relate to symptoms of ADHD. The study was conducted with 2284 college students who were 18-20 years old. A survey was done that included sleep schedule, sleep problems, and an ADHD self-report scale. Patients were grouped according to responses to the ADHD scale. The “highly likely ADHD” and “probable ADHD” groups had a greater incidence of current sleep problems. Insomnia affected nearly 74% of the “highly likely ADHD” group compared to around 36% of the non-ADHD group. The authors concluded that patients with ADHD often have more problems with sleep but future studies should be conducted to evaluate a causal relationship.

Gau SSF, Kessler RC, Tseng WL, et al. Association between sleep problems and symptoms of attention-deficit/hyperactivity disorder in young adults. *Sleep*. 2007;30(2):195-201.

FROM THE LAY LITERATURE...

Jet lag is a growing problem with the increasing number of overseas business trips. Some experts say that it takes one day for each time zone away from home to adjust to the local time. Jet lag effects are considered worse when traveling east. There is no set remedy for jet lag and effects vary person to person. Some people report success with use of melatonin. Others have found that going to bed earlier prior to travel helps jet lag resolve more quickly. There are also prescription sleep aids that can be used to help people fall asleep during flight. For the complete article on jet lag, visit <http://travel.nytimes.com> Finney PB. The science of Zzzzz's. *New York Times*. 2006 Aug 8.

There are increasing reports of **sleep-walking** in patients who use of zolpidem (Ambien®). People are also doing more than just walking; there are numerous reports of traffic accidents. People that had experienced problems with zolpidem were invited to submit their stories to the Atlanta Journal-Constitution. One reader reported not remembering driving her car to the store and purchasing cigarettes. Another reader reported waking up in jail after hitting a parked van and crashing into a tree. This "Ambien amnesia" appears to be a very rare side effect but can be dangerous and scary for the patient. For more information, see Graedon J. Ambien amnesia can be dangerous. *Atlanta Journal Constitution*. 2007 Feb 14. (copy and paste the following link into your browser) <http://www.ajc.com/search/content/health/stories/2007/02/09/0214ambien.html> and Saul S. Some sleeping pill users range far beyond bed. *New York Times*. 2006 Mar 8. <http://www.nytimes.com/2006/03/08/business/08ambien.html?ex=1299474000&en=17cf99894f297014&ei=5088&partner=rssnyt&emc=rss>

Sleep deprivation can interfere with memory, energy levels, mental abilities, and emotional mood. Causes include stress, medical conditions or medications, caffeine, and sleep disorders. Patients with sleep deprivation have increased risk for weight gain, impaired concentration, stress intolerance, weakened immune system, and emotional instability. These patients are also at higher risk for being involved in car accidents. From Sleep-Deprivation.com last modified on February 1, 2007. <http://www.sleep-deprivation.com/>

Shift workers are considered to be anyone with a schedule other than the typical "9 to 5". Serious problems that shift workers face include frequent sleep disturbance and excessive sleepiness. Sleepiness in the work place can lead to poor concentration, accidents, errors, injuries, and even fatalities. Some examples of jobs that may require shift work are firefighters, police, medical professionals, and security guards. Shift workers have increased incidence of cardiovascular and GI problems. Shift work is becoming more common for pharmacists with increasing numbers of 24-hour drug stores as well as hospital positions. Visit the National Sleep Foundation c2007 "shift work" information page at <http://www.sleepfoundation.org/site/apps/nl/content.asp?c=huIXKjM0IxF&b=2457455&ct=3501381>

"Drowsy Driving"... According to the National Highway Traffic Safety Administration, over 100,000 automobile accidents per year are caused by driver fatigue. The fewer hours of sleep you get, the more risk you have of being the cause of a car accident. Young adults, parents of small children, and shift workers are at higher risk for driver fatigue. Studies have shown that driving while fatigued is as dangerous as driving drunk. Pull over and take a short nap if you feel fatigued while driving. Caffeine can provide temporary alertness but is not a replacement for sleep. From Sleep-Deprivation.com "driver fatigue" information page last modified on February 1, 2007. <http://www.sleep-deprivation.com/html/dangers.php3>

Caffeine is a stimulant and is most often used after waking up or to remain alert during the day. Three 8 oz cups of coffee per day is considered a moderate amount of caffeine while six or more cups is considered excessive intake. Caffeine can temporarily make a person feel more alert by blocking sleep-inducing chemicals in the brain and increasing epinephrine production; however, it is not a substitute for nor can it replace a good night's sleep. Moderate doses of caffeine can cause insomnia, nervousness, headaches, irritability, and decreased fine motor coordination. For more information on caffeine content of various foods and beverages, see

Caffeine Content (mg)	
Coffee (8 oz)	108.0
Red Bull	80.0
Jolt	71.2
Vault	70.0
Mountain Dew	55.0
Surge	51.0
Tea (8 oz)	47.0
Diet Coke	45.6
Coke	34.0
Slim-Fast	20.0

<http://www.energyfiend.com/the-caffeine-database/>

Information from the National Sleep Foundation c2007 "caffeine" information page at

<http://www.sleepfoundation.org/site/apps/nl/content.asp?c=huIXKjM0IxF&b=2457455&ct=3501381>

How much sleep do you need??? The amount of sleep a person requires changes with age. Some people can function with less sleep time than others. Generally...

- Newborn to 24 months: 13-17 hours
- 2 to 9 years old: 9-13 hours
- 10 to 15 years old: 10-11 hours
- 16 to 65 years old: 6-9 hours
- >65 years old: 6-8 hours



From Sleep-Deprivation.com last modified on February 1, 2007. <http://www.sleep-deprivation.com/>

TIPS on CATCHING SOME ZZZ's...

- Set a regular bedtime and awakening time
- Exercise regularly but not right before bedtime
- Avoid stimulants such as caffeine or nicotine 4-6 hours before bedtime
- Don't take regular naps
- Only use the bedroom for sleeping (don't watch TV, read books, study in the bed)
- Don't just lie awake in bed, get up and do something until you are sleepy



Make sure your bedroom is comfortable and quiet (select a mattress firmness that works best for you)

Breus MJ, Mathis CG. How to sleep better: 'Sleep Hygiene' solutions for better sleep.

From WebMD, Inc. c2007 <http://www.webmd.com/content/article/62/71839.htm>



Other Important Dates in March

- National Colorectal Cancer Awareness Month
- Save Your Vision Month
- National Brain Injury Awareness Month
- St. Patrick's Day (17th)
- World Tuberculosis Day (24th)
- AU SPRING BREAK (26th-31st)



The last "dose" ...

"A good laugh and a long sleep are the best cures in the doctor's book."
-- Irish Proverb

*An electronic bulletin of drug and health-related news highlights, a service of ...
Auburn University, Harrison School of Pharmacy, Drug Information Center*

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