



**Age Management
AMMG
Medicine Group**

Evidence-based continuing medical education
conferences, publications, web media and
membership for healthcare professionals

Previous Conference Faculty



Elissa Calapai, M.D. Christopher J. Centeno, M.D. Deborah Longwill, D.O. Martin Braun, M.D. Paul Cenac, M.D.

2008 Conferences



Main Menu

▶ Home
▶ Conference Archives
▶ Conference Recordings
▶ Alan P Mintz MD Award

Partners

▶ Supporters
▶ Become A Supporter / Exhibitor
▶ Academic
▶ Media

Supporters

Platinum:



Gold:



Feature Article - e-Journal of Age Management Medicine - October 2008

Sleep Disorders: The Impact on Age Management Medicine

Jeff Morris

At least 40 million Americans suffer from chronic, long-term sleep disorders each year, and an additional 20 million experience occasional sleeping problems. Besides interfering with work, driving, and social activities, such disorders also account for an estimated \$16 billion in medical costs each year. According to the Centers for Disease Control (CDC), insufficient sleep is associated with the onset of a number of chronic diseases and conditions, such as diabetes, cardiovascular diseases, obesity, and depression, and also may complicate their management and outcome. Sufficient sleep is increasingly being recognized as an essential aspect of chronic disease prevention, which is one of the foundations of Age Management Medicine.

The National Sleep Foundation says adults typically need 7–9 hours of sleep per night. There are, of course, some common sense tips for “sleep hygiene”—the promotion of regular sleep—that you can recommend to patients who complain of problems getting enough sleep:

- Go to bed at the same time each night, and rise at the same time each morning.
- Sleep in a quiet, dark, and relaxing environment, which is neither too hot nor too cold.
- Make your bed comfortable and use it only for sleeping and not for other activities, such as reading, watching TV, or listening to music.
- Remove all TVs, computers, and other "gadgets" from the bedroom.
- Avoid physical activity within a few hours of bedtime.
- Avoid large meals before bedtime.

The Food and Drug Administration (FDA) has its own list of “Tips for Better Sleep,” which duplicates some of the tips above, but adds some others:

- Avoid caffeine, nicotine, beer, wine and liquor in the four to six hours before bedtime.
- Don't exercise within two hours of bedtime.
- Don't nap later than 3 p.m.
- If you can't fall asleep within 20 minutes, get up and do something quiet.
- Wind down in the 30 minutes before bedtime by doing something relaxing.

Michale “Mickey” Barber, M.D., CEO of Cenegeneics South Carolina in Charleston, says that sleep was pretty much ignored by doctors for a long time. Today, she recognizes the quality of her patients' sleep as an essential element of what she does as an Age Management practitioner.

AMMG Membership

▶ Join AMMG
▶ Member Login

About AMMG

▶ History
▶ Mission Statement
▶ Advisory Board
▶ Related Services
▶ Contact Us

e-Journal

▶ Subscribe
▶ Current Issue
▶ Issue Archives
▶ Advertise
▶ Submit Articles
▶ Editorial Mission
▶ Contact Us

General Information

▶ What is Age Management Medicine?
▶ Directory of Products and Services
▶ Age Management Seminars & Events
▶ Suggested Readings
▶ Glossary of Terms
▶ Links



"Sleep is extremely important," says Dr. Barber. "We restore our hormones and replenish our muscles while we're sleeping. But I think most Americans have some sort of sleep disturbance." Consequently, sleep is an important part of the patient interview in her practice. She notes that a key factor in the quality of information you get from patients depends on how you ask the question. "I rarely ask 'Do you sleep well?'" says Dr. Barber. "I ask, 'Do you feel rested in the morning?' That will get a much more accurate answer. I would say at least 90 percent of our patients say they only get a good night's sleep 60 percent of the time. Then I get more specific, asking things like, 'Do you get up at night?', 'Do you wake up to urinate?', 'What wakes you up?', 'What keeps you from sleeping?'"

According to the National Institute of Neurological Disorders and Stroke (NINDS), a part of the National Institutes of Health, doctors have described more than 70 sleep disorders. The good news is most of these can be managed effectively once they are correctly diagnosed. The most common sleep disorders include insomnia, sleep apnea, restless legs syndrome, and narcolepsy. Some sleep disorder centers add others. Among them is the Sleep Disorders Center at Columbia-Presbyterian Medical Center in New York, which, established in 1977, was among the first in the U.S. devoted exclusively to the practice of sleep disorders medicine. Columbia-Presbyterian adds excessive daytime sleepiness, irregular sleep-wake schedules, and sleepwalking to the list. Many of the disorders overlap, and often symptoms of one are caused by another. Let's take a brief look at each of the major ones.

Insomnia is the inability to fall asleep or to stay asleep. Poor sleep during the night can be a serious problem in itself and can result in decreased wakefulness, concentration, and performance during the day. There are many causes of insomnia, most of which can be treated. According to NINDA, almost everyone occasionally suffers from short-term insomnia, which can result from stress, jet lag, diet, or many other factors. About 60 million Americans have insomnia frequently or for extended periods of time, which leads to even more serious sleep deficits. Insomnia tends to increase with age and affects about 40 percent of women and 30 percent of men. It is often the major disabling symptom of an underlying medical disorder.

Sleeping pills are often prescribed for short-term insomnia, but most stop working after several weeks of nightly use, and long-term use can actually interfere with good sleep. Mild insomnia often can be prevented or cured by practicing good sleep habits. For more serious cases of insomnia, researchers are experimenting with light therapy and other ways to alter circadian cycles.

Insomnia

Restless legs syndrome (RLS) is a familial disorder which affects as many as 12 million Americans, causing unpleasant crawling, prickling, or tingling sensations in the legs and feet and an urge to move them for relief, and leads to constant leg movement during the day and insomnia at night. According to NINDA, RLS is emerging as one of the most common sleep disorders, and severe RLS is most common in elderly people, though symptoms may develop at any age. In some cases, it may be linked to other conditions such as anemia, pregnancy, or diabetes.

Many RLS patients also have a disorder known as periodic limb movement disorder or PLMD, which causes repetitive jerking movements of the limbs, especially the legs. These movements occur every 20 to 40 seconds and cause repeated awakening and severely fragmented sleep. In one study, RLS and PLMD accounted for a third of the insomnia seen in patients older than age 60.

Narcolepsy affects an estimated 250,000 Americans. People with narcolepsy have frequent "sleep attacks" at various times of the day, even if they have had a normal amount of nighttime sleep. These attacks last from several seconds to more than 30 minutes. People with narcolepsy also may experience cataplexy (loss of muscle control during emotional situations), hallucinations, temporary paralysis when they awaken, and disrupted night-time sleep. These symptoms seem to be features of REM sleep that appear during waking, which suggests that narcolepsy is a disorder of sleep regulation. Symptoms typically first appear during adolescence. The disorder (or at least a predisposition to it) is usually hereditary, but it occasionally is linked to brain damage from a head injury or neurological disease.

Excessive daytime sleepiness is a frequent complaint, with potentially severe consequences including impaired job performance, automobile accidents, and a reduced ability to enjoy the pleasures of life. The sleepiness may take the form of sudden, short attacks of irresistible sleep or lack of concentration. Excessive daytime sleepiness is usually a consequence of too little sleep or very disrupted sleep. Although often attributed to overwork or psychological causes, daytime sleepiness can be a symptom of an undiagnosed medical disorder. It is frequently the first symptom that patients recognize and often the one symptom that drives a patient to seek medical help.

Irregular sleep-wake schedules disrupt the body's normal biological rhythms and can lead to insomnia, daytime sleepiness, or generalized irritability and depression. Columbia-Presbyterian attributes this disorder, which often manifests itself as jet lag and malaise associated with rotating shift work, to "the frenetic pace of industrialized society."

Sleep apnea is a disorder of interrupted breathing during sleep. According to the National Institutes of Health it is as common as adult diabetes, and it is estimated that 12 to 18 million Americans have sleep apnea, though few of them have had the problem diagnosed. The American Sleep Apnea Association (ASAA) says the Greek word "apnea" literally means "without breath." There are three types of apnea: obstructive, central, and mixed; of the three, obstructive is the most common. It usually occurs in association with fat buildup or loss of muscle tone with aging—changes that allow the windpipe to collapse during breathing when muscles relax during sleep. During an episode of obstructive apnea, which is usually associated with loud snoring (though not everyone who snores has this disorder), the person's effort to inhale air creates suction that collapses the windpipe. This blocks the air flow for 10 seconds to a minute while the sleeping person struggles to breathe. When the person's blood oxygen level falls, the brain responds by awakening the person enough to tighten the upper airway muscles and open the windpipe. The person may snort or gasp, then resume snoring. This cycle may be repeated hundreds of times a night.

Sleep apnea also can occur if the neurons that control breathing malfunction during sleep. In central sleep apnea, the airway is not blocked but the brain fails to signal the muscles to breathe. Mixed apnea, as the name implies, is a combination of the two. With each apnea event, the brain briefly arouses people with sleep apnea in order for them to resume breathing, but consequently sleep is extremely fragmented and of poor quality. The frequent awakenings that sleep apnea patients experience leave them continually sleepy and may lead to personality changes such as irritability or depression. Sleep apnea also deprives the person of oxygen, which can lead to morning headaches, a loss of interest in sex, or a decline in mental functioning. It also is linked to high blood pressure, irregular heartbeats, and an increased risk of heart attacks and stroke. Patients with severe,

untreated sleep apnea are two to three times more likely to have automobile accidents than the general population. In some high-risk individuals, sleep apnea may even lead to sudden death from respiratory arrest during sleep.

Risk factors for sleep apnea include being male, overweight, and over the age of forty, but it can strike anyone at any age, even children. Yet still because of the lack of awareness by the public and healthcare professionals, the vast majority remain undiagnosed and therefore untreated. Patients with the typical features of sleep apnea, such as loud snoring, obesity, and excessive daytime sleepiness, should be referred to a specialized sleep center that can perform a polysomnography, which records the patient's brain waves, heartbeat, and breathing during an entire night. If sleep apnea is diagnosed, several treatments are available. Mild sleep apnea frequently can be overcome through weight loss or by preventing the person from sleeping on his or her back. Other people may need special devices or surgery to correct the obstruction. People with sleep apnea should never take sedatives or sleeping pills, which can prevent them from awakening enough to breathe.

"If I have any suspicion that patients have sleep apnea," says Dr. Barber, "I recommend that they see a sleep specialist, because that's a real separate issue. I would say about 20 percent of those with sleep problems wind up being referred."

A wide variety of other signs and symptoms are commonly seen in association with sleep, including chest pain, respiratory distress, and headaches. Among the most potentially dangerous sleep-related disorders are sleepwalking and related symptoms, including walking, talking, screaming, and the performance of other behaviors in sleep. These are important symptoms that are too often ignored. Sleepwalking presents a danger of accidental injury and, furthermore, can be a sign of medical illness or psychological stress.

Though complaints related to sleep vary, Dr. Barber finds that there are some treatments that make sense for most patients. "I have almost all my patients on melatonin," she notes; "it is always part of the regimen because we lose a milligram of melatonin a day after age 40." Dr. Barber has also noted a marked correlation between hormonal imbalance and sleep problems. "I've had male patients with bad leg cramps, which were causing them to wake up, and the hormone levels in these men were quite low; they had inadequate hormones to repair muscles during sleep." While the evidence is anecdotal, the cramps were eliminated after hormone balancing, and so were their sleep disruptions. A lot of women also complain of disrupted sleep and generally improve once they are on hormone replacement therapy. "There hasn't been much clinical research in this area," Dr. Berman points out, "But I find after we really balance their hormones and get them on an exercise and treatment program, it usually alleviates the symptoms."

Even with all the many varieties of sleep disorders and their often complicated interactions and symptoms, Dr. Barber says the questions she asks that often elicit the most revealing answers are based in common sense. "I'll ask, 'When is the last caffeine you have during the day—coffee, tea, chocolate, sodas?' And, 'If you're waking up to urinate, when do you have your last liquid?' Surprisingly, a lot of people don't make the connections. These are simple things, but they help to determine if it is a sleep disorder that is treatable."