Information for Patients

Sleep, Insomnia and Migraine
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Key Points:
1. Schedule consistent bedtime that allows 8 hours time in bed.
2. No TV, reading, music in bed.
3. Use visualization techniques to shorten time to sleep onset.
4. Move your last food to at least 4 hours before bedtime; limit fluids within 2 hours of bedtime.
5. Stop naps.

Overview
Medical providers have known for over a century that there is an association between poor sleep and the frequency and intensity of migraine and other pain syndromes. Insomnia, also referred to as psychophysologic insomnia by many, is one type of poor sleep. The longer word suggests interplay between mind and body factors in insomnia. Other common types of sleep difficulties include sleep apnea, frequent snoring, and excessive daytime sleepiness. Researchers define insomnia as difficulty falling asleep (initiation or onset of sleep) or staying asleep, early morning waking, or waking up feeling unrefreshed. These latter types are sleep maintaining problems. Insomnia, of one or both types, is a common finding amongst individuals with chronic migraine. In many cases, insomnia may stem from other medical problems which cause chronic pain (making it difficult to sleep comfortably) or which disrupts normal sleeping patterns. Until recently this relationship between insomnia and migraine was not well studied.

Information from Research and a Simple Treatment Plan
At the University of North Carolina (UNC), Chapel Hill, researchers studied this association by interviewing 147 adults with transformed migraine (TM). None of the patients reported feeling “refreshed” upon waking and four out of five regularly felt “tired” upon waking. This compares to responses of individuals with infrequent migraines – approximately one in four felt “refreshed” upon waking and only about one in three awakened feeling “tired.”

TM has frequently been used for those with migraine who at some earlier time had lower number of headaches including migraines and have “transformed” to higher frequency over 15 days per month. Officially a International Classification system defines chronic migraine as individuals with fifteen or more days of headache for greater than 3 months and 8 or more days of either migraine drug use for headache or migraine descriptive pain symptoms. In this UNC survey insomnia was a complaint of the majority of those who had more than 15 days of headache with migraine with two-thirds having difficulty falling asleep. When asked about their sleep habits, almost 80% watch TV or read in bed, 70% get up in the middle of the night to use the bathroom, approximately 60% regularly nap during the day, and a little greater than 3 months and 8 or more days of either migraine drug use for headache or migraine descriptive pain symptoms. In this UNC survey insomnia was a complaint of the majority of those who had more than 15 days of headache with migraine with two-thirds having difficulty falling asleep. When asked about their sleep habits, almost 80% watch TV or read in bed, 70% get up in the middle of the night to use the bathroom, approximately 60% regularly nap during the day, and a little over 50% regularly use sleeping pills. Interestingly less than one in ten used caffeine within 8 hours of bedtime. This poor quality of sleep and the suboptimal sleep habits reported by these researchers represent typical sleep issues for those with frequent, severe migraine needing specialty headache care. Can addressing insomnia positively affect sleep and migraine?

These UNC researchers attempted to see if making changes in sleep patterns could have an effect on migraine frequency and intensity. Forty-three women with chronic migraine were randomly placed into one of two groups. The first group received formal instructions on how to improve their sleep habits. The other received placebo instructions. They were asked to keep a diary of their headaches. Six weeks later at follow-up women who changed their sleep behavior saw a significant improvement in headache frequency and intensity. Dramatic improvement was seen in one of three, to the extent that they no longer met criteria for chronic migraine. None of the placebo group had such a dramatic change. However, this placebo group was then given the formal teaching that the other group received and followed for another six weeks. At the final visit, six weeks later, almost 50% of all subjects who followed the sleep suggestion experienced headache improvement so that they no longer met criteria for chronic migraine. The sleep plans given to the patients to improve their sleep quality were listed in recommendations 1-5 in italics at the top of this article. Since they are so important read them again here:

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Risk Factors for a Sleep Disorder
Since poor sleep can be associated with more frequent and severe migraine, it is only natural to ask what factors place people at risk for developing a sleep disorder. Changes behaviors as suggested in the sleep plan address factors that can disturb sound sleep. Other potential risk factors for insomnia include:

- Stressful life events, such as death of a loved one, divorce, or the loss of a job.
- Day-to-day life stresses such as concerns about school, work, family and finances may lead to disruptive sleep.
- Depression, anxiety and other mental health disorders can lead to fragmented sleep patterns, and these individuals can have trouble sleeping or may even sleep too much.
- Medications including prescription drugs and medications available over-the-counter. Many prescription drugs, including antidepressants, corticosteroids, allergy medications, pain medications, and blood pressure medications can interfere with sleep patterns. Other over-the-counter medications, including those for allergies, cough and cold, and weight loss, can also disrupt sleep. Many can leave you feeling groggy, others contain caffeine and other stimulants that prevent you from getting a good night’s sleep.
- Using caffeine, nicotine, alcohol – especially before bed. Caffeine and nicotine contain stimulants that can keep you up at night. Alcohol can initially lead to sedation, but it prevents you from reaching deeper stages of sleep, can lead to wakening in the middle of the night, and a feeling of not being refreshed in the morning.
- Medical conditions associated with sleep pain, breathing difficulties, or frequent urination can lead to sleeping difficulties. Medical conditions that have been linked with insomnia include arthritis, gastro-oesophageal reflux disease (GERD), cancer, lung diseases, congestive heart failure, overactive thyroid, obstructive sleep apnea, and Parkinson’s disease. Treating these conditions can lead to better sleep.
- Change in environment or work schedule, such as jet lag from changing time zones, working nights, or shift work, can lead to insomnia.
- Eating too much or too late in the evening can lead to trouble sleeping due to heartburn. Many people experience heartburn after meals, and this can be worsened by lying flat.
- Poor sleep habits, including irregular sleep times, stimulating activities before bed, and reading, watching TV or studying/working in bed can all contribute to insomnia.
- Female gender – women can experience hormonal shifts during their menstrual cycle and during menopause that can lead to trouble sleeping. Lack of estrogen is thought to play a role.
- Age over 60 – As sleeping patterns change with age, insomnia often becomes more common. It is estimated that nearly half of elderly individuals suffer from sleep problems.

More on Sleep Plans
Several lifestyle modifications, particularly changes to your daytime and bedtime routine, can help with insomnia. Try to include the following in your sleep plan:
Stick to a regular sleep schedule. Keeping your sleep times consistent, even on weekends, can help maintain your body's natural sleep rhythm.

Get out of bed when you're not sleeping. In the mornings, allow yourself to sleep as much as you need to feel rested, and then get out of bed. At night, if you are unable to fall asleep after 15 minutes, get out of bed and try to do something relaxing, such as reading. Try to wait until you become drowsy before getting back in bed and attempting to sleep.

Use your bed and bedroom only for sleeping and intimate relations. Don't eat, read, work, or watch TV in bed.

Find ways to relax before bed. Creating a relaxing bedtime ritual, such as a warm bath, reading, soft music, yoga, or prayer can all be helpful techniques.

Avoid napping, as taking naps can make it more difficult to sleep at night. If you cannot avoid a nap, limit it to no more than 30 minutes, and don't nap after 3 PM.

Make your bedroom conducive to sleep. Close the door or run a fan to create a soft background noise to shut out other noise, adjust the temperature so that it's comfortable, and keep the bedroom dark. Don't keep a TV or computer in the bedroom.

Exercise and stay active. At least 30 minutes of vigorous exercise daily, 5-6 hours before bedtime, can be helpful.

Avoid or limit caffeine, nicotine, and alcohol.

Avoid large meals or beverages before bed.

Check your medications to see if they have possible side effects which may be contributing to sleep problems.

Adequately treat your pain so that it's not keeping you up at night.

Set your alarm so that you know when it's time to get up in the morning, but otherwise hide the clocks from view. The less often you know what time it is at night, the better you'll likely sleep.

You might consider crossing out or putting an X before those activities you have mastered or accomplished, circling or placing an O before those you consider an Opportunity or not accomplished and then star or * in front of a priority that you believe you can accomplish. When you succeed with that goal star another opportunity and so on and so on until all are marked with a finished X. When you achieve this you will be sleeping more soundly if not, you are in need of the 33 Sleep Secrets you can locate under the Search option on www.mercola.com or advice at www.sleepfoundation.org. Otherwise, consider a very well trained sleep center/specialist assessment.

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