Sleep and Other Medical Conditions

Sleep problems are an underlying cause of many health conditions.

According to the National Institutes of Health, 50 to 70 million people in the United States are affected by chronic sleep disorders and occasional sleep problems that can impact health, alertness and safety.

**Hypertension**

People with sleep-disordered breathing (SDB) are at higher risk of developing high blood pressure (hypertension). The risk may be related to SDB severity: The more severe the SDB, the greater the risk of developing hypertension.

During healthy sleep, blood pressure normally falls. This is called the “dipping phenomenon.” When someone has SDB, they don’t have this blood pressure “dip” at night. They tend to have higher blood pressure readings both at night and during the day. Some patients with sleep apnea may not be sleepy at all, and their only sign of the condition is having high blood pressure.

SDB is present in more than 30% of patients with hypertension, and in around 80% of patients whose hypertension cannot be controlled by medication. For this group of patients in particular, treatment with positive airway pressure therapy or another treatment method such an oral appliance may be especially important.

**Diabetes**

Sleep apnea is common among patients with Type 2 diabetes. It is independently associated with insulin resistance, glucose intolerance and metabolic syndrome. When untreated, sleep apnea can lead to poor overall treatment outcomes. However, despite the number of Type 2 diabetes patients with SDB, sleep apnea largely goes undiagnosed.

Because patients with sleep apnea and patients with diabetes often have similar health issues, screening for both is recommended: If you have sleep apnea, ask if you should be screened for diabetes; if you have diabetes, ask if you should be screened for sleep apnea.

**Stroke**

Having a stroke can sometimes change your breathing patterns at night and can cause SDB, such as central sleep apnea or obstructive sleep apnea. Patients who have a stroke and have SDB have been shown to have worse functional outcomes. For this reason, if you have had a stroke or transient ischemic attack (TIA, a “mini-stroke”), your physician may test for sleep apnea.

On the other hand, people with SDB may be more likely to have a stroke. SDB has been linked to several conditions that could increase risk of stroke, including:

- Frequent drops in blood oxygen levels (intermittent hypoxia), which can lead to inflammation in the body
- Increased sympathetic response (fight-or-flight)
- Hypertension and diabetes
- Poor mental health, including anxiety and depression

If you have hypertension, diabetes, anxiety, depression or a history of stroke, or if you snore, talk to your physician about your quality of sleep.
Better Sleep for Teens

Healthy sleep habits are particularly important for children and teenagers whose bodies are still growing and developing. Here are tips to help them get the sleep they need.

• Create a media-free zone and keep the bedroom quiet. Turn off cell phones, tablets, laptops and video games 30 to 60 minutes before bedtime.

• Recommend a hot bath before bed. Keep the bedroom cool. Sleep occurs faster when the body cools down.

• Keep the room as dark as possible. Consider room-darkening shades and a lightweight, comfortable sleep mask that prevents light entry. Keep the door closed. Turn the clock facing away from the bed, and do not charge devices in the bedroom, as even that small amount of light is disruptive.

• Allow bring light in when awakening. Open the shades or turn on the lights once awake. The early light of the day helps reset the brain to push bedtime to an earlier hour.

• Unwind before bedtime. Going to bed worried decreases the quality of sleep. Use relaxation techniques to calm the mind and ease stress. Consider yoga or meditation.

• Consider high-carb snacks before bed. Some dietitians recommend snacks such as pretzels, cereal, graham crackers, fresh fruit, dried fruit, popcorn, or toast with jam or jelly before bed.

• Consider a night scent. Aromatherapy such as orange blossom, chamomile or lavender scents may be soothing and promote sleep.

• Avoid caffeine before bedtime. Sometimes teens forget that caffeine can be hidden in their favorite sodas and snacks. If they’re craving something hot to drink, recommend a warm cup of herbal tea.

When to Seek a Sleep Evaluation

The majority of people with sleep disorders are undiagnosed and untreated.

Most people know when to seek medical help for physical discomfort such as pain or a fever. However, sleep problems are often overlooked or ignored.

To determine whether a sleep evaluation is indicated, consider the following questions:

• Do you regularly have difficulty getting to sleep or staying asleep?
• Do you snore?
• Has anyone told you that you have pauses in breathing or gasp while sleeping?
• Are your legs active at night? Do you feel tingling, creeping, itching, pulling or aching in your legs?
• Are you so tired when you wake up in the morning that you cannot function normally during the day?
• Do sleepiness and fatigue last for more than two or three weeks?

If you answer “yes” to any of these questions, talk to your physician about having a complete sleep evaluation.

To learn more or to make an appointment for an evaluation at Northwestern Medicine, visit nm.org/sleephealthcenters.

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