

Speaker Series Summary Episode 15: Rest & Recovery: Sleep Insights for the GBS|CIDP Community

## Overview

In this Speaker Series episode, we talked with Dr. Brandon Peters, a neurologist, sleep specialist, and researcher at Virginia Mason Franciscan Health in Seattle. This discussion dives into the world of sleep, medications, treatments, lifestyle changes, and other factors that impact sleep.

## Summary

<p><b>What is Sleep?</b></p>	<p>The formal definition of sleep: the transient, reversible loss of consciousness of the environment. Sleep is vital for restoration of tissue, preserving memories, and promoting learning and creative thinking.</p> <p>Sleep flows in a pattern called “Sleep Cycles.” These cycles are 90 minutes to two hour cycles that fluctuate between non-Rem and Rem Sleep.</p> <ul style="list-style-type: none"> <li>• REM is 20-25% of the night.</li> </ul> <p>Sleep declines with age and starts to focus on restoring muscle mass and tissues as one ages.</p>
<p><b>What is a health amount for sleep for those with autoimmune conditions?</b></p>	<p><b>The average adult gets 8 hours and 10 minutes of sleep.</b></p> <ul style="list-style-type: none"> <li>• Most fall into the range of 7-9 hours, yet sleep is different for everyone.</li> <li>• People with autoimmune and/or neuropathic conditions will need more sleep because of of symptoms like fatigue.</li> <li>• Older adults 65 and older need less sleep because their deep sleep declines with age.</li> <li>• Similarly, younger children and young adults will need more sleep than adults.</li> </ul>
<p><b>What determines a person’s sleep needs?</b></p>	<p><b>1) Age 2) Work and familial Changes 3) Mental Health</b></p> <p>Consistency is beneficial, as your body does not account for the weekend, and thus maintaining regular hours is key to regular, quality sleep.</p>

**What determines a person's sleep needs?  
(continued)**

Keep a consistent bed and waking up time accompanied by 15-30 minutes of visual sunlight exposure (not staring into the sun) as soon as possible after waking.

- This improves your circadian pattern to help you wake up and fall asleep faster.

It is better to have drowsiness or sleepiness around your bedtime.

- If you cannot go to sleep at the same time, move your bedtime up by increments of 15 to 30 minutes every week.

People with chronic diseases may need naps during the day.

- They should be short at a maximum of 30 minutes.
- Longer naps will go into other sleep cycles and may take away from nightly sleep.

**How does someone determine if they have sleep apnea or insomnia?**

**Sleep Apnea and Insomnia often overlap**

Sleep Insomnia:

- It takes 20-30 minutes to go to sleep.
- Symptoms include: waking up in the middle of the night, waking up exhausted with fatigue, cognitive issues like concentration, mood swings, short term memory, anxiety, depression, chronic pain, etc.
- Chronic Insomnia: This happens at least 3 times a week for more than 3 months.

Sleep Apnea:

- Symptoms include: snoring, dry mouth, clenching/grinding teeth, night sweats, palpitations at night, heart burns, frequent visits to the bathroom during the night, waking up with mental fog and headaches, sleepiness during the day, fatigue, cognitive complaints like mood complaints, etc.
- Home testing: a test that measures breathing patterns to see if there are blockages in one's throat that result in one waking up.
  - If this happens 5 times an hour, it is sleep apnea.
  - If this happens 30 times an hour, it is chronic sleep apnea.
- In-center testing or a Polysomnogram: a test that measures one's brain waves, movements, and heart rhythms.

If these disorder go untreated it can:

- worsen blood pressure, increase risks of prediabetes and diabetes, potentiate heart arrhythmias like atrial fibrillation, increase risks of heart attack, heart failure, stroke, dementia, etc.

<p><b>How does someone determine if they have sleep apnea or insomnia? (Continued)</b></p>	<p>Treatment:</p> <ul style="list-style-type: none"> <li>• Oral appliances like CPAP Therapy.</li> <li>• Long term: allergy management, weight loss and it's medication, implants like Inspire, Hypoglossal nerve stimulator.</li> </ul>
<p><b>What do I do if I cannot sleep, knock myself out, or nap?</b></p>	<p>Circadian Delay or Delayed Sleep Phase Syndrome: when a person has a hard time waking up thus creating a late sleep schedule. Typically individuals go to sleep after 12am and wake up after 10am. Essentially, they are trying to initiate a deeper sleep, but are interrupted by their airways becoming compromised.</p> <p>The inability to nap is common for those with Insomnia and is often called “tired but wired”. People who are “tired but wired” can get exhausted and fatigued but will not get drowsy.</p> <ul style="list-style-type: none"> <li>• Drowsiness: the feeling of becoming sleepy with longer blinks and yawning, often associated with a “warm feeling.”</li> <li>• Symptoms of fatigue, tiredness, exhaustion, or low energy are not signals that these people will dose off.</li> </ul>
<p><b>What is your opinion on sleep trackers?</b></p>	<p>Sleep trackers are not 100% accurate.</p> <ul style="list-style-type: none"> <li>• Wearable devices take into account your movement and heartrate. So if you wake up, but do not move, it may think you are still sleep.</li> <li>• The device's brand does not indicate an improved accuracy of data. These trackers are 80-85% accurate to the gold standard.</li> </ul> <p>Sleep scores are not helpful for physicians.</p> <ul style="list-style-type: none"> <li>• They can hurt sleep by creating Orthosomnia, the unhealthy obsession with perfecting sleep. <ul style="list-style-type: none"> <li>◦ When one fails to perfect their sleep, they can become angry and anxious which could make sleep worse.</li> </ul> </li> <li>• It is hard to manipulate and increase REM Sleep or deep sleep. <ul style="list-style-type: none"> <li>◦ Behavioral changes have little affect on maximizing sleep.</li> </ul> </li> </ul>
<p><b>Are sleeping aids like melatonin and cannabis effective?</b></p>	<p>As of 2020: 6% of adults take sleep medications everyday for the past month and 13.5% of older women use sleep medications.</p> <p>What is happening:</p> <ol style="list-style-type: none"> <li>1. Aids enhance sleep signals: GABA, Melatonin, etc. <ol style="list-style-type: none"> <li>a. Melatonin can have side effects like headaches and nightmares</li> <li>b. GABA receptors are affected by drugs like non-benzodiazepine or Z drugs like Zolpidem, Ambien, Lunesta, Zaleplon, Melatonin agonist, Orexin antagonist.</li> </ol> </li> </ol>

**Are sleeping aids like melatonin and cannabis effective?  
(Continued)**

2. Aids block waking up signals: Histamines, Arex, and Hypocretin
- Antihistamines or PM Drugs include Benadryl, Diphenhydramine (Unisome), or Trazadone.

Cannabis is not well studied or promoted by the government research, yet studies prove cannabis can:

1. Relieve anxiety and stress
2. Increase sleep
3. THC can cause hallucinations that may not improve sleep

CBD may not be useful for long term use.

- Other naturals like Valerian root, Serotonin, Tryptophan supplements are converted to melatonin naturally.

Do not use KAVA KAVA because it is associated with liver toxicity and is banned in Europe.

Most people do not need medicine to improve their sleep.

- There is a very rare percentage of people who make lifestyle changes and still need medicine.
  - These people do not get sleep at all and need consultations from a neurologist and somnologist.
  - Referrals take time and are not always covered by insurance.

CIDP is often associated with sleep apnea because of its effect on the muscles and tongue.

- Not every symptom a person experiences is due to their condition but also their lack of sleep.

**What are some lifestyle factors that can improve sleep?**

**Health = exercise + nutrition + sleep**

Some foods can inflame airways and increase mucus production like dairy, gluten, processed sugars, histamine-potent products like wine, etc.

A normal amount of exercise = more sleep, deeper sleep, less fragments of wakefulness during the night.

It is important to get sunlight and decrease blue light exposure.

- In addition to light, activity like scrolling is extremely important to decrease.
- Avoid devices for at least an hour before sleep.

<p><b>What are some lifestyle factors that can improve sleep? (Continued)</b></p>	<p>For those who wake up before the sun:</p> <ul style="list-style-type: none"> <li>• Short burst of light are good.</li> <li>• Windows do not help light intake.</li> <li>• Use a light box with at least 10,000 lux</li> </ul> <p>Half life of Caffeine is 4-6 hours.</p> <ul style="list-style-type: none"> <li>• If you drink a cup at 9 am, at 9 pm 25% of caffeine is still in your system.</li> <li>• Those who are sensitive to caffeine may have more insomnia and should not drink caffeine midday or after work.</li> </ul>
<p><b>How does stress and mental health impact sleep?</b></p>	<p><b>It is a bi-directional relationship.</b></p> <p>Stress and anxiety can increase insomnia. People with depression sleep longer, and in the worst cases, people can sleep 16 hours and still do not feel rested.</p> <p>On the contrary, sleep apnea can increase stress and anxiety by waking up with high cortisol levels, heart rate, and mind racing.</p> <p>When someone has a sleep disorder and a mood disorder:</p> <ul style="list-style-type: none"> <li>• Fixing their sleep disorder first is more effective than treating their mood disorders first.</li> </ul>
<p><b>How does the treatment of our conditions impact sleep?</b></p>	<p>Common side effects of IVIg include sleepiness and fatigue right after infusion.</p> <ul style="list-style-type: none"> <li>• To treat these side effects: <ul style="list-style-type: none"> <li>◦ IVIg infusion rate can be slowed</li> <li>◦ Hydrate before and after infusions</li> <li>◦ Sleep after infusions</li> </ul> </li> </ul> <p>Additionally, steroids commonly cause insomnia.</p>
<p><b>What is the relationship between pain and sleep?</b></p>	<p>Why is pain worse at night? We do not definitively know.</p> <ul style="list-style-type: none"> <li>• Gate Control Theory: When gates are open you feel stress. So stress can open these gates while messages can close them.</li> <li>• Cold generally worsens neuropathic pain and it more common at night.</li> </ul> <p>Circadian Rhythm of pain: Day time production of hormones and cortisol that decrease pain are less present at night.</p>

<p><b>What is the relationship between pain and sleep? (Continued)</b></p>	<p>Poor sleep quality, limited sleep, and untreated sleep disorders all contribute to pain.</p> <ul style="list-style-type: none"> <li>• Example: 1/2 of patients with fibromyalgia have sleep apnea.</li> </ul> <p>Neuropathic conditions like CIDP can cause restless leg syndrome: periodic limb movements of sleep that can disrupt sleep or make it hard to fall asleep.</p>
<p><b>What is CBT-I?</b></p>	<p>Cognitive Behavioral Therapy for Insomnia</p> <ul style="list-style-type: none"> <li>• A 6 week program of one on one therapy or doctors appointment for sleep. <ul style="list-style-type: none"> <li>◦ You learn about sleep needs, changes, aids, techniques like stress reduction, mindfulness, etc.</li> <li>◦ Data comes from a wearable device or self reported.</li> <li>◦ Has no risks.</li> <li>◦ You can learn more about this therapy from his book, “Sleep through Insomnia.”</li> </ul> </li> </ul>
<p><b>Alternatives to CPAP machines</b></p>	<p>Oral devices treat mild to moderate sleep apnea.</p> <ul style="list-style-type: none"> <li>• Need a dentist to fit the mask.</li> <li>• Appointments and devices may not be covered by insurance.</li> </ul> <p>Other Alternatives:</p> <ul style="list-style-type: none"> <li>• Weight loss medication, allergy treatment, nasal strips, nasal surgery, Hypoglossal Nerve Stimulator (Inspire)</li> </ul>
<p><b>How to minimize snoring</b></p>	<ul style="list-style-type: none"> <li>• Treat yourself for sleep apnea.</li> <li>• Saline Spray.</li> <li>• Breathe Right Strips.</li> <li>• Mouth Tape.</li> <li>• Elevated Head or sleep position.</li> </ul>
<p><b>Does therapies like acupuncture help?</b></p>	<p>There is some evidence that acupuncture can help insomnia, anxiety, and pain.</p> <p>Other techniques like Breathe work and yoga nidra may help.</p> <ul style="list-style-type: none"> <li>• These are easily accessible on YouTube.</li> </ul>

**Why do people have nightmares especially those with CIDP?**

Sleep Apnea, sleep paralysis, and airway muscles are paralyzed can cause nightmares especially in REM sleep.

- When sleep is broken with a mixed state of consciousness, there is a point of fragmentation that causes nightmares.
- It is important to understand why you are quickly coming out of REM sleep.

**What is a healthy bedtime routine or natural ways to promote sleep?**

1. Consistency is important.
2. Light Exposure within 15 minutes of waking.
3. Limit stimulating activities like scrolling or phone usage an hour or half-hour before sleeping.
4. Reduce blue light exposure.
5. Be careful taking alcohol and caffeine before sleep.

## Relevant Resources

[Sleep Books by Dr. Peters](#)

[Sleep Logs](#)

[Centers of Excellence](#)