

Episode 220: Sleep and Its Impact on Migraine

Lindsay Weitzel, PhD:

Hello and welcome to HeadWise, the videocast and podcast of the National Headache Foundation. I'm Dr. Lindsay Weitzel. I'm the founder of Migraine Nation and I have a history of chronic and daily migraine that began at the age of four. Today, we are lucky to have Dr. Lauren Natbony. Hello Dr. Natbony. How are you today?

Lauren Natbony, MD:

Hi. Good, thank you.

Lindsay Weitzel, PhD:

We are so lucky to have her as our guest. She is a board-certified neurologist and headache specialist. She is also the founder of Integrative Headache Medicine of New York. She is an assistant and clinical professor of neurology in the Division of Headache and Facial Pain at Mount Sinai's Icahn School of Medicine. We have had her on previously and I love her viewpoints. They are a little bit different than some of the people that we talk to, and so I love to hear everything she has to say. And so, we asked her back on.

Our topic today is all things sleep and especially for people with migraine and other headache disorders. We have some questions that are going to be a little different than what you hear on some other educational videos, so I hope that they hit the nail on the head for those of you that have trouble sleeping. Dr. Natbony, this might sound silly, but why do we sleep at all? Why can't we be like vampires and just live life awake all the time?

Lauren Natbony, MD:

Because that would be more fun, but sleep is essential for our survival. Just like eating, breathing, we need to sleep. And sleep really allows for our brain and our cells to repair, to consolidate memories, to restore our energy and really to heal. So, without it, our entire system just can't function. We actually can't live without sleep.

Lindsay Weitzel, PhD:

Why is it helpful in particular for those of us with migraine?

Lauren Natbony, MD:

As everybody probably knows, irregular sleep or poor sleep can trigger migraine, and good sleep can help prevent migraine. Sleep regulates our neurotransmitters like serotonin and dopamine which are involved in migraine pathways. And then during sleep we need that time for our brain to sort of reregulate. I look at it as like, this is our repair and our refresh time. And if our brain doesn't get that, it is more likely to trigger migraine.

Lindsay Weitzel, PhD:

Many of us have devices that monitor our sleep now, give us feedback on things like REM sleep, deep sleep, light sleep. What are the differences between these things? Because it occurred to me that a lot of the time they say, that's good. I don't have that. They say that's good. I don't have that. But I don't know the details of why it's important.

Lauren Natbony, MD:

I think that's such a great question, because so many of us have all of these things that we're tracking and measuring, but we don't really know what they mean. So, I love this question and I like to go over with my patients too.

Light sleep is basically that transition phase when we start relaxing, like we're just trying to get into our sleep mode. And we actually spend most of the night here. So, most of our time is spent in light sleep. But it's not really the most restorative stage of sleep.

The stage of sleep that's the most restorative is deep sleep. Deep sleep is really crucial for our memory, our immune function. It's really important for migraine prevention because it reduces inflammation and stress. So, if you're really, really stressed, you want to try to get more deep sleep.

And REM sleep actually makes up the least amount of our sleep. And this is the dreaming stage. So, if you ever wake up from a dream, you're most likely in REM. And this is really the most critical for cognitive function, for memory, for emotional regulation. We know that dysregulations in REM, especially if you're getting broken sleep, is linked to an increased migraine frequency. So really when we are thinking about migraine or looking at the time spent in deep sleep and REM sleep and consistent deep sleep and REM sleep, it's really important to stay in the stages.

Lindsay Weitzel, PhD:

How many hours of sleep are we supposed to get at night? I feel like this is controversial. I know everyone loves that number 8, but is the recommendation the same for everyone? I used to think I was getting a lot more sleep than I was, and then I got a device and realized that I was lying there awake at least two hours of the night at some point. So, this is an interesting question, I think.

Lauren Natbony, MD:

The general recommendation is 7 to 9 hours for adults, but there are some super sleepers. I actually have a friend who's a super sleeper who literally only needs 4 or 5 hours. And then on the other spectrum, there are people who really just need more sleep. So, I think it really does vary based on your age, your genetics, your health condition.

I feel that people with migraine kind of need more rest. So, it might not be like more sleep, but just more rest in general. But we know that ~~both~~ under sleep being and oversleeping can both be migraine triggers. But I don't really like to focus as much on the hours as on the consistency. Because I feel like the number of hours can vary and we might still feel fine. But having sleep disruption and going to bed at wildly different times, waking up at different times, dysregulates our melatonin, our hormone production. So, I find that trying to focus on the regularity of sleep is more important than the number of hours.

Lindsay Weitzel, PhD:

I'm going to ask specifically about some things that people with migraine focus on when it comes to sleep. Because as someone who has had migraine my whole life, sleep does not come easy to me at all. I can't even talk about sleep with a straight face sometimes depending on how things are going. So, I'm going to let you talk about this because I am not a sleep expert. I barely know how to do it. So, let's just say, does regular exercise help us sleep?

Lauren Natbony, MD:

It really does. And I feel like I know everyone promotes exercise for like everything, but exercise does help improve our quality of sleep overall. It promotes deeper sleep. It helps regulate our circadian rhythms. But I would say intense workouts closer to sleep can be overstimulating, so it's best to avoid that. But regular exercise, regular routine is helpful. Yes.

Lindsay Weitzel, PhD:

How about the timing of our meals? There is this thing with me that everyone thinks is crazy, but I grew up in an Italian family. We eat huge dinners, and I know that's not a good thing. So, talk to us about timing of meals and sleep.

Lauren Natbony, MD:

I actually started experimenting with this myself. I'm sort of nerdy and I like to know the impacts of things. Everyone always said don't eat late at night. And I was like, why? I actually started tracking my sleep and realized if I eat later at night, especially sugary foods, carbs, my sleep cycles were disrupted.

I don't go into deep sleep or REM until much later in the night. It's more stimulating to the nervous system. So, eating earlier before bed or if you have to eat, something protein light before bed is okay. But it really can interfere with your ability to go into the right stages of sleep at the right time. So, this is something that we can monitor for ourselves and see if that has an impact.

Lindsay Weitzel, PhD:

Let's talk about some of the things we take to help us sleep. Now, I know a lot of people with migraine like to talk about melatonin. Let's start with that. Do you think it can be helpful?

Lauren Natbony, MD:

So, melatonin, there have been studies showing that melatonin, 3 milligrams, have been helpful for migraine prevention, in addition to potentially helping with sleep. But I think we really have to say that melatonin is not a sleep aid. And I think this is the biggest point I want to drive home is that melatonin is our body's natural sleep hormone.

It is not meant to help us get groggy to fall asleep. It helps regulate our circadian rhythm, which is our natural, sleep wake cycle. The role of melatonin really is for phase shifts. For example, jet lag when you're changing time zones, and you want to re-regulate your cycle to the new time zone. It is for

people who, let's say their natural body wants to go to sleep at 3 a.m., but life is telling them they have to go to bed at 11 p.m. We use it to phase shift back their sleep to a more acceptable pattern.

But it is not really meant to be a sleep aid. Sure, taking it in the moment might make you feel a little bit groggy, but it is really not a sleep aid. So, I just want to put it that it's fine to take, but at the same time it's not something that we should be dependent on to make us go to sleep.

Lindsay Weitzel, PhD:

This I've always thought was interesting. I've seen it at Walgreens, etc. What about some of the over-the-counter sleep medicines? One of the newest ones I've seen lately is ZzzQuil Pain, which I think they basically took ZzzQuil, which is an over-the-counter sleep medicine, and maybe added some Tylenol to it, I think, if I remember right. So, we can get some of these things over the counter if we're in pain and want to sleep. Do you think these are helpful?

Lauren Natbony, MD:

First, I'd like to say the combination products I don't love because we can't titrate to what we each individually need. Yeah, some of them might be fine. But if we're just looking to sleep and don't have pain, I would say using something just for sleep. If we have pain, using something just for pain. But overall, most over-the-counter sleep-aids have diphenhydramine, which is Benadryl. And what this is doing is it is sedating.

I want to point out the difference between being sedated versus something that is promoting sleep. So, if you're sedated, and there are lots of things that could be sedating, it makes you sleep, but you're not going into the right stages of sleep. So, it doesn't improve your sleep quality and actually can cause drowsiness the next day and rebound insomnia.

So, using diphenhydramine short term, sure, one, two nights. But I see huge problems when it comes to using it long-term. It also sort of dysregulates the autonomic nervous system, which interferes with, again, our parasympathetic, sympathetic states and our ability to sort of self-regulate. So again, short-term fine, long-term not a sleep aid.

Lindsay Weitzel, PhD:

I wanted to switch to something completely different here. Because I have seen things you've written on this and it's way more important than people without migraine understand. We have neck pain when we have migraine, so many of us. And pillows are a big deal. People used to make so much fun of how huge my suitcase was everywhere I went, because I used to before we had the pillows that we could scrunch up, I had a neck pillow I swear to God was this big. So, talk to us about neck pillows, because I know that you've put a lot of thought into this.

Lauren Natbony, MD:

I probably own more pillows than anybody else. My husband cannot fit in the bed because the entire side is lined. I think I have like 18 pillows, and I'm always switching between them depending on how my neck feels. So, what I've learned in my many years of pillows is that measuring the height basically of your head and neck ratio, and then making sure the pillow aligns so you have the right loft, and the

right height is the most important thing. Because otherwise your head is sagging or it's up too high, which can put strain on the neck.

Lindsay Weitzel, PhD:

Can I interrupt? Is this like laying on your back, laying on your side, or do you need to get the right pillow so you can do both?

Lauren Natbony, MD:

That is what I was going to say. The right pillow for the right way you sleep. So, a side sleeper is going to be very different than a back sleeper versus the stomach sleeper. So, I'm a side sleeper. And my biggest issue is this curve sort of right here fitting perfectly in the pillow. And then what to do with my arm. So sometimes the pillow, it will have too much curvature, some of them on this area. And then it will sort of dip down and I feel like it's like just too much. Others it'll be just be like really squishy. So, it's the right ratio. And so, I actually go and measure sort of the different pillows and how they also sustain night after night. So, some will be at the right height but then gradually go down.

So, I think two main things to take away, and there's a lot more I can go through on pillows, is know your sleep type. You should say are you a side sleeper, a back sleeper, a stomach sleeper, or all of them. Because you're going to be in multiple positions. The pillow has to be able to accommodate multiple positions.

And then also knowing basically the height of the pillow that you need. Are you a low height, standard height, do you need something even higher than the standard height? And then narrowing down pillows based on that. And then you have the memory foam. There're water pillows. There're all different types of pillows. I tried the water pillows.

I really literally have tried everything. The self-adjustable fill pillow. I think finding which type of pillow is most comfortable to sleep on, everyone has a little bit of a preference. And then narrow it down from there. I feel like there should be a pillow expo where you can just try like every pillow. That would be like that would be super helpful. Or you can come to my house where I literally have all of them.

Lindsay Weitzel, PhD:

So basically, I think that the one of the messages to get across is if you are spending a lot of time and money and energy trying to find the right pillow because you have migraine and neck pain, you're not the only one. You're not crazy. It's probably a good idea to spend some time on that.

Lauren Natbony, MD:

Yeah. And I feel like I spend a lot of time talking about it with my patients. But there's not just one right pillow. And I think that's where it gets frustrating. It's that it really is a trial-and-error process. But I'm with you. I get it. The pain is real.

Lindsay Weitzel, PhD:

Now I'm going to ask the questions people don't necessarily get about sleep on a lot of our education and headache videos. First, I'm going to ask, though, we didn't really go into prescription medications for sleep. Can you let us know, do you think this is something that migraine patients should look into if they really can't sleep?

Lauren Natbony, MD:

I really do. I actually think that correct prescription medications, not ones that are just making us drowsy, but actually that are sleep promoting are vital. And I think a lot of times seeing a sleep doctor or seeing a sleep doctor that's really well versed in insomnia, because a lot of them do sleep apnea or other areas.

But finding a medication that helps you fall asleep, stay asleep, it can be extremely difficult. But if it helps, it puts you into the right stages of sleep. So, it actually promotes correct sleep. So, I would say if you are having trouble sleeping, obviously, treating migraine obviously can be helpful. There are some medications that can do a little bit of dual benefit. So definitely exploring that. But the key is finding something that can help short term that isn't interrupting and making the sleep worse over time. And then identifying if there is an underlying sleep issue and tailor treatment to that issue.

Lindsay Weitzel, PhD:

I'm going to have two more questions that I think are pretty tailored to us and are practical. And hopefully we'll get some tools. So, let's say I'm a person with migraine, and I'm probably exhausted because I get a lot of migraine. And I go to bed, and I've been laying there for a significant period of time, and I'm still wide awake, even though I'm exhausted. What do I do?

Lauren Natbony, MD:

I love this question. It happens to all of us. It happens to me.

Lindsay Weitzel, PhD:

It's never happened to me before.

Lauren Natbony, MD:

Never, never. Last night. I think the first thing is try to stay calm and don't get overly frustrated. I think, first of all, our whole body tends to tense up, why can't I fall asleep? And that sort of revs up our sympathetics, our fight or flight, and it makes it even harder. So, I would say if you're still awake after 20 to 30 minutes, get up. Do not keep lying there. Get up and do something that is calming, slightly boring, and make sure it's in dim lighting. So, you can read a book. You can listen to a podcast.

Lindsay Weitzel, PhD:

Not this one. This one's not boring.

Lauren Natbony, MD:

Not this one. My favorite one. There are some really great podcasts out there that are boring stories that actually help me personally to fall asleep. So, you can look into those. You want to avoid screens of blue light. You don't want to go turn the TV on. I feel like certain people are like, I can't sleep, I turn the TV on. You're just going to be suppressing melatonin. Same thing with your phone. So, devices away, trying to do something in dim light that is calming and boring.

Lindsay Weitzel, PhD:

Pet the dog. I wake up my poor dog. My poor dog doesn't get to sleep either because I wake her up and pet her.

Lauren Natbony, MD:

My dog sleeps in my bed, not good for sleep hygiene!

Lindsay Weitzel, PhD:

You've got pillows, the husband and the dog?

Lauren Natbony, MD:

There's no room. I feel like I am going to fall off. I don't know how I don't fall out of bed. But I also point out why does this happen? Like, even though you might have migraine and you're exhausted if this keeps happening, think to yourself, is my body just not ready to go to sleep? A lot of times there's a mismatch between what our body wants and what our brain knows it should do.

So that mismatch is not going to work. There are ways to train the brain in the body to realign. And that's a method called cognitive behavioral therapy for insomnia. It goes through that to realign things. And it's just basically your internal clock just might not be aligned. So don't always be like this is going to be a lifelong problem, what do I do, and get really anxious about it. Because there are methods and ways to go about it. But I'd say first thing is don't just lay there, get up.

Lindsay Weitzel, PhD:

So, then I'm going to ask it differently in case the advice is different. What if I'm one of those people who wakes up at, let's say, 1:00 am every morning, and can't sleep for two hours. What's your recommendation for that person? Not me. It never happens to me. But that person.

Lauren Natbony, MD:

So, it's going to be similar, but there are a few other things. So, my first inclination whenever that happens is I pick up my phone. I'm like, what time is it? What time is it? How many more hours do I have to sleep? Because I'm always like, oh my God, like if I wake up now, I'm not going to get all of my sleep.

So, I think, do not look at the clock. Do not pick up your phone. Do not get into that anticipatory anxiety phase that I do. Please learn from my mistakes. Again, get out of bed after 20 to 30 minutes if you're not able to fall back asleep. Similar tips as before, deep breathing relaxation, boring podcast. But I think if this is happening one-off, you can sort of write it off. But a lot of times this happens repeatedly, and I tend to find that there are things that can perpetuate interrupted sleep and waking up. So, a lot of

times I'll wake up and I'm too hot. I think making sure that the room is a cool temperature. You want it to be cold. You want to be huddled under those blankets because our body during the night can wake up due to temperature dysregulation.

Make sure we are looking at our caffeine cut off time. Don't be drinking caffeine too late. Could it be that you're waking up if it's like at the same time every night. Like is your blood sugar dropping. Is there something happening. You have to go to the bathroom. So, there are a lot of things that can disrupt sleep.

So, it's not just going to be a blanket like, this is what you do. It's if you notice it's happening, we need to talk about it and identify are there patterns? Sometimes there's not, but a lot of times we can find things and sort of help.

Lindsay Weitzel, PhD:

Is there anything else that you would like to add to this topic before we go today?

Lauren Natbony, MD:

Very quickly just some practical tips for sleep and migraine. Most important, keeping a consistent schedule. Don't nap. Or if you're going to nap make sure it's less than 30 minutes because that will decrease your sleep drive. Make sure your sleep environment is cool, quiet, and calm. Let's start with those. Those are hard. I think for a lot of a lot of us anyway. I feel like sleep is the most co-morbid thing that I see with migraine and one of the hardest things to treat. So, I empathize. I'm with you. So, the more we can educate on sleep and try to find ways to promote better sleep, it will really help migraine in the end.

Lindsay Weitzel, PhD:

All right. Well, this has been really fun and very informative, and I hope everyone got something out of this. Thank you everyone for joining us. And thank you Dr. Natbony for being here today. Please join us again on our next episode of HeadWise. Bye bye everyone.