HeadWise Episode 181: April Headache and Migraine News

Lindsay Weitzel: Hello everyone, and welcome to Head was the video cast and podcast of the National Headache Foundation. I'm Dr. Lindsay Weitzel. I am the founder of Migraine Nation and I have a history of chronic and daily migraine that began at the age of four. Today is our monthly Headache news episode with Dr. Tim Smith. Hello, Dr. Smith. How you doing today?

Tim Smith: I'm doing great. Thanks for having me on again. It's always a pleasure.

Lindsay Weitzel: Thank you for being here. Dr. Smith has extensive experience in migraine clinical trials as the CEO of Study Metrics Research. He is also a board member of the National Headache Foundation. We're very lucky to have him here to give us some insight into the latest migraine and headache medical news. We're going to start with a new exercise study.

Lindsay Weitzel: One group set out to look at what types of exercise were best for people with migraine. What did they uncover, Dr. Smith?

Tim Smith: Yeah. So this is an interesting little study. Basically, we always talk about exercise being good for healthy living, healthy lifestyle. Things are good for our migraine patients. Some of our migraine patients struggle with being able to exercise, especially if their head pain is bad. But this group looked at the types of exercise engaged in and had some sort of interesting findings. If they looked at headache frequency, this was most likely to be improved by aerobic exercise.

So walking or cycling or jogging, as the case may be, something that more vigorous aerobic exercise. Get your heart rate up, get you breathing good or more rapidly. And the aerobic exercise also decreased the direct duration. So frequency and duration were best managed by aerobic exercise. But if you wanted to look at intensity of attacks, this is a little different. And only yoga of the types of exercise looked looked at actually decreased the intensity of the headache so people can take it. For what it's worth, think about what you do with your exercise. But I would just argue that those folks that can't engage in a heavy aerobic exercise could certainly do a version of yoga and still reap benefit too, especially as it pertains to intensity.

Lindsay Weitzel: Okay. We'll move on to our next study. There has been some question as to whether certain monoclonal antibodies against DRP might have the side effect of increasing blood pressure. One study out this month looked at a renewed MAB or aim of ECG and its effect on blood pressure. Let's talk about the results of this particular study.

Tim Smith: Sure. So basically, this study is, we know that a random mab, the brand name in the Vic in the US, has been sort of I wouldn't say singled out, but they wound up with warning in their package label regarding elevated blood pressure. And then the take home is, clinical people should and patients should monitor blood pressure on patients with who are on a your MAB And this study was a retrospective trial that they had done at a headache clinic using observational data. And the interesting sort of numbers that we take from this is that 24, nine, 21% of patients had hypertension at baseline. So these were hypertensive patients at baseline. But during the observation period in the study, 23.3% had worsening of their hypertension. And these were patients on arrangement or an on aim of. So on face value that sounds like a obviously not a positive thing. Right. And so for a random AB.

Lindsay Weitzel: Did this study have any limitations?

Tim Smith: Well, yeah, I think that's the important point to make here is, so we do have this observation over time of of worsening hypertension presentations. But there was no comparison in this. These were this was an within group comparison, start to finish now of how many people evolved into having problems with having hypertension presentations, elevated blood pressure presentations. And they argue that there should be increased surveillance of blood pressure on patients who are on or anywhere. But, what's missing on this is what about people who worked on a randomized what about the other monoclonal? What about people were on on a CJP blocker at all? Were their differences in those groups? And this is sort of a difference within the group, which may be important, but it's not an indictment or any kind of, conclusive thing.

So it's it's a it's, it's an observational study. We like those, but we take them in the context of which they were performed and sort of with their limitations. And I might even argue that, we check blood pressures on everybody anyway. And, I would check them on my other monoclonal patients as well, just to make sure we're not missing something. if it's it's the kind of thing, what you look for, you find. So if you're looking for blood pressure in a randomized patients, not saying there's not an issue. I'm just saying that, that's what you're looking for, you're likely to find it, So anyway.

Lindsay Weitzel: Okay. Well, the next study that we're going to talk about, I thought was actually fun to read. I'm not sure I can make any sense of the results, but it was interesting. As we know, migraine is often unilateral or occurs on one side of the head. This research group aimed to determine if there were any differences between people whose migraine pain occurred, mostly on the left or right side. What did they find?

Tim Smith: Yeah. So this this study was kind of interesting. Fascinating to me for a couple of reasons. I mean, I think, we it is there is there a difference between, the sidedness of of headaches in terms of patients lives? We know that a unilateral aspect to headache is one of the diagnostic criteria for migraine. However, not all people have just a one sided headache. And many times there there migraine will switch sides. And we've seen that happen lots of times before. But this study, the first database was this was this was a longitudinal study. It was based on intake questionnaires at a and a headache clinic. And they gather data for 20 years, I mean, 20 years that this is a huge undertaking. And what a database to look at. Right.

So I expect we're going to continue to see, other analyzes that that come out of this. But when they just looked at the strict sidedness of the headache and what they did is they eliminated all the people that had global headache or wishy washy headache that switched sides as people that if they had a if they declared that they had a side sidedness, this and what they had to do is they didn't ask them, do you have one sided headaches, stroke. Yeah. They said they gave them a little figure of a little cartoon of a of a head and said draw on the head or color in the spot where your headache occurs. And they only included people in the study who had who identified only one side. If they went across both sides of the head, they were not included in the study. And if they had more than one type of headache, both types of headache had to be on the same side for them to qualify.

So they're really focusing on patients who are distinctly left, patients who are distinctly right. And when they looked at it, there were almost 49% of the people had left sided. And just over 51% had right sided. There was no in-betweens because they excluded those. And when they looked at a lot of different characteristics for the their these migraine patients lives, there was separation on two parameters that they measured. And one was the severity of the migraine attacks. And the folks with the left side of

migraine had worse migraine severity. And when they looked at total headache days of any time, there were more total headache days on the patients with the left sided migraines as compared to the right side of, So I think that's pretty interesting. I can't, for the life of me tell you why, and I don't think the authors know for sure either that this separated, but it's not good news for lefties, I guess the left not left handed people, but the left left sided migraine patients. And this is an important study. It's over 6500 people in there.

So this is not just like a small study where you could have an out couple of outliers that really determine the outcome of the study. Right. So fascinating stuff. I hope that prompts some researchers somewhere to try to help us find out why. the tissue issue is what it is. But pretty interesting. It's kind of fun to think about, as you pointed out, but for some people might be sort of frustrating, I guess.

Lindsay Weitzel: But yeah, I'm impressed that they did that much trouble for to find that out. So it is it is interesting. I'm curious to see if if anything ever comes of that.

Lindsay Weitzel: So we're going to move on to a study on caffeine in migraine, which seems to be a very popular topic lately. We covered a study on this last month, too. Now we have another one that's been published. Both studies seem to be debunking some of our traditional thoughts about caffeine in migraine. What is the latest group find?

Tim Smith: Basically, if you when they looked at the range of caffeine users from chronic habitual higher volume everyday users all the way down to people who never drank a drop of caffeine, there was actually no difference. Kind of music to my ears since I'm I'm a higher than the caffeine and I've always done it with a little bit of guilt, Yeah, but yeah, this is another study that shows that the, the caffeine use as a migraine risk factor or trigger or causal agent is somewhat overblown. I will put in the disclaimer that, our patients are viewership, people that listen to this and they know their headaches are worse with caffeine. I don't think this, changes your personal experience. So I'm not trying to, debunk what you've observed in your own life. If caffeine makes your headaches worse, by all means, do what's right for you. But from a statistical standpoint, looking at large populations of patients with varying degrees of use of caffeine, there's not much difference in terms of migraine, disability and, frequency, etc..

Lindsay Weitzel: All right. Well, that's good news for those of us that love our coffee. We've got two more studies to report on. Another study out this month was on the relationship between migraine, photophobia and sleep quality. Everyone knows that people with migraine often don't sleep well. I think this study was awesome because we all know light exposure has an effect on circadian rhythm.

Lindsay Weitzel: And also I think that we just all wish we understood why we're great sleepers. So what does this study find that's interesting?

Tim Smith: So this is the second migraine characteristic. So this is photophobia as part of the migraine diagnostic criteria. So it's a very recognizable and no pretty unique to migraine, or other headache types may or may not. But for migraine, this is a really significant symptom for many of our patients. In lots of our studies, we look at when we ask patients what are what's your your number one nonpaying symptom and photophobia is right at the top of the list. So this is it affects a lot of our our patients. And what these researchers did is they looked at presence or absence of photophobia as a predictor of sleep disturbance. And so to cut to the chase, basically our patients that have the more photophobia, the more light sensitivity you have, the more likely your chances are that you're going to be have poor sleep,

difficulty initiating sleep and difficulty staying asleep. So it's an interesting finding. And I think the even more interesting sort of food for thought and you pointed you alluded to it, is our circadian rhythms.

So the authors went on to sort of hypothesize or propose that part of what could be going on here is that our patients with migraine with four phobias, light sensitivity, are much more likely to seek out a dark place even during the day and during the daytime. And surveys have shown upwards of 80%, 85% of patients with photophobia will say they reliably seek a darker environment as a as a reliable way of helping to helping them to cope with their with their migraine symptoms. And the authors said that, that significant departure from light sources can sort of change the biological imprint on on the brains of people who don't have as much daylight exposure or they may have light exposures at varying times through the day. And they don't they sort of get out of the circadian rhythms that are normal daylight, light, nighttime dark. And these people are spending much of their daylight hours in the dark. And it may sort of scramble up some of the brain's ability to have normal sleep architecture and so that the brain doesn't go through its normal cycles of sleep.

So people can have more difficulty falling asleep or more difficulty staying asleep, maybe not just associated with migraine, because we always talk about my sleep disturbance. We know that's common in migraine patients. We always hypothesize that it's just because of that sensitive, sensitized, able, alerted, vigilant brain that we have that, makes it hard to fall asleep. It makes, makes us wake up to at least a number of noises. And then once you're awake, you can't fall back to sleep. It's a story we hear time and time and time again.

So the interesting correlation is that maybe it's not that necessarily that sensitive brain. I mean, obviously there's the likelihood that that is involved. But it could be that the disturbance and the circadian rhythms of people who can consistently and frequently seek shelter from light sources throughout their day to day lives may kind of, mess up their their circadian rhythms and may mess up their sleep cycles. So, yeah, interesting phenomenon, Tony. Makes sense.

Lindsay Weitzel: I love the study because I can't say that it really occurred to me that much as someone that walks around wearing sunglasses every time I go outside and I really do kind of stay away from most lights. So. So I thought that that was just a great idea. So I'm glad we got to report on that one. We do have one more study.

Lindsay Weitzel: Last but not least, we have a pediatric headache study. We see so few studies in kids. I like to report all the pediatric headache studies that we can find. This one was looking at kids with unremitting headache to see if there were any predictive characteristics for improvement. What did they find that predicted that unremitting headache might actually stop?

Lindsay Weitzel: And some of these kids.

Tim Smith: So the unremitting or unrelenting or persistent headache, these are the kids that just they can't catch a break. They and there was. yeah, yeah. They're always fighting a headache or worrying about the next one or trying to recover from one and not fully getting rid of it. We know the story. And what they did is these researchers looked at those those kids looked at children as they began the school year. They categorized them as as as unremitting, chronic, persistent. I guess it's hard for children to be chronic necessarily. But, they've had, unrelenting, unremitting migraine for months. And they're heading into the school year. And they did a series of questionnaires at the beginning of the school year. And they

also did them at the end of the school year. And the ones they did at the first part of the school year, they used to see retrospectively if they could find some characteristics that would predict or would be associated with children who were possibly going to remit or their headaches were going to go away or become less and less relentless during the during the course of the school year.

Tim Smith: And lo and behold, they did have children that did and they had children that did not. That continued to have unrelenting headache all through the school year. And so they separated those to be the two study groups, but they naturally separated themselves. And then they could look at those questionnaire scores at the beginning of the study and see if there was a difference between or demographics or other differences between the populations. They could look at them and see if there was a difference in any of those characteristics. And what they saw is that patients, these children, patients that had unrelenting migraine at the beginning of the school year, if they're the ones with the higher pain scores, the ones that had comorbid anxiety, the ones that had co-morbid depression and the female patients were were more likely to be to continue to be unrelenting.

Tim Smith: The male patients and the ones with the lower initial pain scores, the ones who did not have anxiety or depression at the beginning, they were the ones they typically turned out to be. It didn't guarantee that they would, remit or stop having their headaches or be have a much more normal pattern of headaches. But it was there was a strong association. And then lastly, at the end of the study, they looked at the scores of patients between the two groups. And some of this is not surprising, but the remitted population, the patients whose headaches did either stop or went into a more normal, manageable, intermittent migraine pattern. Those those kids were less likely to have. They were they were less likely to have mood disorders. They were more likely to have satisfaction with their school experience than we had better sleep, too.

So sleep, sleep issue again. So they fell asleep. Better they stayed asleep longer. They were less anxious, they had less depression. Their depression scores went down if they were high from the beginning and the other group, the Unremitted group that continued to have the headache all the way through the school year in the same fashion, they were less likely to in have an acceptable school experience who had worse quality of life. They had more co-morbid mental health issues and poor sleep. So it's kind of interesting, to follow those cohorts, you starting to prospectively sort of agnostic where you don't know who how it's going to turn out. Do you do the same assessments on those kids at the beginning of the year? You do the same assessments at the end of the year, and they almost stratified themselves into this, into these these groups.

Tim Smith: So if we could use some of as those learnings to help, understand which kids were at high risk at the beginning of the year, you could have a more sensitive awareness of that possibility that these kids are going to struggle. You could direct more educational resources to them. You, if you have mental health research resources available at the school, then you would potentially try to prioritize and give them the full benefit of that a little more than than the others. Not that you would deprive of the others if they have bona fide issues, but yeah, all thing else, everything else being equal, you could use these data to support, management concerns like that.

Lindsay Weitzel: Right, Right. If nothing else, it gives me hope for know I didn't do so great. I stayed, daily unrelenting. But my son, who's currently daily, it gives me some hope that he'll get better because he's male, etc.. So anything that we can learn about these kids because they struggle so much is just is just wonderful because there are so few studies done on them.

Lindsay Weitzel: And the more we can do that better. So I hope that some parents out there learned a little something from that study. So thank you so much for being with us again today, Dr. Smith. And thank you, everyone, for joining us on this month's episode of Had Wise News.

Lindsay Weitzel: Join us again next week. HeadWise goodbye.