#### **Episode 205: News**

#### Lindsay Weitzel, PhD:

Hello everyone, 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. We are here for our regular HeadWise news episode, where we go over the latest studies, research, data on migraine and other types of headache disorders that has been released. I am super excited to tell you that I am here with Dr. Susan Hutchinson. Hello, Dr. Hutchinson, how are you today?

# Susan Hutchinson, MD:

Hello Lindsay. I'm doing great.

# Lindsay Weitzel, PhD:

Dr. Hutchinson is a headache specialist and the founder of Orange County Migraine and Headache Center in Irvine, California. She is sought after for her knowledge related to women and headache medicine. And I love talking to her every time I have her on. I just feel honored that she's here, and I know we are all going to learn a lot from her. We're going to delve right into some of the newest studies that have come out that I think we're all going to find interesting, and we're going to have Dr. Hutchinson talk to us about them.

The first study we're going to discuss was actually a literature review and meta-analysis of literature that has already been published related to IV medications given for acute migraine in the emergency room setting. Their goal was to assess which IV medications are effective in reducing the chance of relapse in people with acute migraine. In other words, we don't want the migraine to come back once we leave the emergency room. So, Dr. Hutchinson, what did they find in this study that might be of interest to those watching?

# Susan Hutchinson, MD:

I think this is a very important topic, because I bet many of you listeners have had the experience of going to the emergency room where you're given IV treatment for, let's say, a migraine that's gone on for several days. And I think so often the emergency room, maybe they give you, we call it an antiemetic, an anti-nausea like Zofran. They often give you Toradol, which is a non-steroidal.

The problem is, if they just do those things, the headache may come back. And obviously you want to have treatment in the emergency room. You want to go home and not have to come back maybe the next day. So, what these investigators found is that if corticosteroids, you may know it as steroids. A common one to the emergency room is dexamethasone, which is Decadron. There is Solu-Medrol. But the point is the finding of this was that if a steroid is done in the IV as part of the IV treatment, and steroids are very potent anti-inflammatory, then it was much less likely that the patient was going to relapse and come back. I think the take home message for listeners is when you go to an emergency room for IV treatment, please ask if they can include steroids as part of that treatment. I thought this was very impactful.

#### Lindsay Weitzel, PhD:

I think a lot of people that do this regularly for status migrainosus know this. It's part of their cocktail. But people who are just going into the emergency room might not know to ask this question. So, I think this was a great study and I'm glad that we learned this. And is that at an IV or do they take that home in the pill form?

#### Susan Hutchinson, MD:

It can be both. That's a good question, Lindsay. Typically, it would be done in the IV, but you can also be sent home with a steroid dose pack. And I think that is not a bad suggestion Lindsay, because then that could also prevent the headache from coming back. So, any way you look at it, and if you go to more of an urgent care setting and maybe you're given an IM injection, you could ask for a steroid. Because again, it's one thing to take the acute medication. The headache goes away, but we want to prevent it from coming back the next day. We're trying to prevent that relapse.

#### Lindsay Weitzel, PhD:

There is nothing more frustrating than having a very long-term migraine for days and thinking you've got it kicked, and then having it come right back. So this is great advice.

We're going to move on to the next study. There are a few studies we're going to talk about today that are related to the pediatric population. The next one looked at anxiety, depression and headache related disability in a group of pediatric patients under the age of 18 who had migraine. Did they find a relationship between all these variables: the anxiety, the depression, and the headache related disability?

# Susan Hutchinson, MD:

Yes, they did. And I want to point out this was children ages 6 to 17, so both pediatric and adolescents. And this was a large number. This was 9118 that met the criteria. And what was found is that, as you can imagine, many with migraine in this age group also had anxiety and or depression. If they had anxiety and or depression, as you would imagine, there was a higher degree of disability related to their migraine, and that makes sense.

But what was very interesting is those that were seeing a behavioral health specialist. When I think of that, maybe it's a marriage family therapist, a PhD psychologist, they had even greater disability. So, I'm thinking, wow, you would think that person would be helping them, as I'm sure they are. But that just points to the severity. And I think it also points to the idea of having that multidisciplinary approach.

But I think if you're a parent, I don't think it's enough to just have your child, let's say, be seeing a pediatric neurologist if they have anxiety and depression. Be aware of that greater disability and the need to maybe have more of a team approach to helping your pediatric or adolescent patient.

#### Lindsay Weitzel, PhD:

I think one of the things that the parents listening, who often don't know what to do to help their child because we do have so little data, should be encouraged by, is just the sheer number of children and

adolescents that were in this study. It's so rare to find a study in kids with migraine where they were able to study that many people. I thought that was quite awesome. And it was great that you brought up that number. Thank you for that. And it is interesting to think about the fact that it was the kids with the behavioral specialists that might have been doing a little worse. But it just shows that keep seeing that person if you're not doing that well. And all of us have been there when we're in pain and have migraines.

#### Susan Hutchinson, MD:

Again, to reemphasize your point, when you're looking at a study or let's say you see something across your internet, look at how many people were in the study. There's a big difference between drawing conclusions from a study which there's 25 or 50, where this was over 9000. And Lindsay, I always look at that when I look at a published study, how many participants were in the study.

# Lindsay Weitzel, PhD:

The next study looked at reported migraine symptoms in a large group of pediatric migraine patients, again, to see if the current criteria used for diagnosing migraine in kids in the International Classification of Headache Disorders, third edition, which we usually referred to as the ICHD-3, is too strict. Meaning is it too hard to diagnose migraine based on the symptoms that these kids are coming in and reporting. What were the conclusions of this study? I found this pretty interesting.

# Susan Hutchinson, MD:

Yes, I did too because I treat more adults, but I have treated pediatric and adolescents. What they found is that quite a few had this diagnosis of probable migraine, meaning let's say they met the pain characteristics of a migraine. It clearly wasn't tension, but oftentimes they didn't have the sensitivity to light and the sensitivity to noise. Maybe they had one or the other. And so, when you have patients that don't meet all the criteria, you call it probable migraine. And I'm not a big fan of that word.

I think the implication is there's a lot of pediatric and adolescent patients that if we were to be a little bit more inclusive in the criteria, not be quite as strict saying you have to have sensitivity to light and noise, for example. That that would be better because I think it's better to say my child has migraine than my child has probable migraine. Because that that leaves some doubts. I don't like that word.

The bottom line with this is let's see if when they come out with the next version of the criteria, which would be ICHD-4, and again that stands for International Classification of Headache Disorder. I think the implication is let's see if the definition can be broadened, so you're not being quite as strict. Because I think then you get the right diagnosis. And then that can lead to whether it be some accommodations at school. Because let's say I'm filling out a disability form, a request for accommodations for a child, I would much rather say migraine and not have to say probable migraine.

# Lindsay Weitzel, PhD:

You did touch on this, but can you touch on some of the symptoms that these children might have but aren't necessarily gaining them the actual diagnosis of migraine? What were some of these things that these kids were showing up with?

#### Susan Hutchinson, MD:

Well, again, that they can have a headache that is disabling, but maybe they don't have the nausea or vomiting, or maybe they don't have that with all their headaches. The big one that stood out to me is maybe they had the sensitivity to light, but not the sensitivity to noise. So, it was they didn't check all the boxes, so to speak. And I think that's really unfair. I think the movement is to be more inclusive and kind of move away from that term called probable migraine.

# Lindsay Weitzel, PhD:

I found that just super interesting. And I think that can be reassuring to some kids out there. I met one once who had a headache and was just super dizzy, but lights didn't bother them. All of us are a bit different. So, I think that could be reassuring to some of those.

# Susan Hutchinson, MD:

Let me just add one bit to which I think was a good advancement. When we think about adults with migraine, the headache duration is 4 to 72 hours if it's not successfully treated. In the pediatric population, often the headaches are really bad. They come on fast and they go away. So at least with the ICHD-3, the duration for pediatric headache changed to be only 2 hours.

So, if you have a child or a teenager that you really think it's migraine, but they don't necessarily last 4 hours, the criteria has changed to 2 hours for acute treatment. At least that's a move in the right direction as well.

# Lindsay Weitzel, PhD:

Thank you for adding that. We're going to move on to our next one, which is related to vestibular migraine. And we don't have too many clinical trials looking at medications specifically in people who have vestibular migraine. This one is a placebo controlled clinical trial that was just published looking at the use of galcanezumab or Emgality in people with vestibular migraine. What did they find? And was this CGRP monoclonal antibody helpful for this particular population?

# Susan Hutchinson, MD:

Yeah, I think this was very insightful. And to me the gold standard of a study is, was it placebo controlled. It was. These were patients that were diagnosed with vestibular migraine. And when we think about vestibular symptoms like dizziness, lightheadedness, I think that's being underreported and underappreciated as being very much a part of the migraine condition. And I think it's more common than we think it is.

But the point is that patients that met the criteria for this study, they were randomized to either placebo or the galcanezumab injection. Galcanezumab you may know as Emgality. It's one of the CGRP monoclonal antibodies. In the placebo group they got injections, and for the Emgality it's a loading dose of two injections the first month, and after that one a month. If you're in the placebo it was the same thing. You got two injections of placebo, probably saline, followed by once a month. And the good news is those with vestibular migraine did positively benefit versus the placebo.

And I have the numbers here. It was 40 patients, so not a large study. But that's often how studies are done. They're done with a smaller pilot group, so I think we need bigger studies. But there was also I think importantly, not only was there a benefit, there was a reduction of 18 days by month 4. It went down to only 6.6 days. That's huge. That's a big reduction. And the other important thing was no serious adverse events. So now those that have been frustrated because, gosh, I had vestibular migraine, nothing's helped. You can now confidently I think ask your provider for galcanezumab based on this study and hopefully it would help.

#### Lindsay Weitzel, PhD:

I love that one. We have a medication that's successful for a group of our fellow migraine folks.

Let's move on to another recent study that looked at the use of onabotulinumtoxinA injections in children and adolescents with chronic migraine. And I love reporting on studies in kids because we just don't have enough of them. This type of work is very important. We have so few FDA approved treatment options for our pediatric patients, especially the ones with chronic migraine. What did this group find, both when it comes to efficacy and safety of onabotulinumtoxinA in people under the age of 18?

#### Susan Hutchinson, MD:

It's pretty exciting. And I agree, we have a lack of medications that have been FDA approved for pediatric and adolescents. So often we're doing things off label. But it's so nice when studies are done. Some of these were done with placebo and some not, because this was looking at several different studies. And again, this was chronic migraine, so that means 15 days or more. So these are pediatric and adolescents that this is a problem for them in their life. You can imagine all the missed school days. And so in this study they were randomized, some placebo, some Botox, and some of those studies just Botox. But here's the important thing is it was efficacious, and it was safe.

And I'm thinking if I was a mother of a young child with migraine, I realize they may not be really excited to go in for the procedure. But if that's going to help them for 12 weeks at a time, because that's the frequency of Botox, I'm thinking, wow, can you imagine less disability, less missed days of school, and then potentially better responsiveness to their acute medications. The bottom line is the results were positive. I'm hoping that in the very near future, there will be FDA approval to use for migraine in the pediatric and adolescent patient.

A quick funny story, Lindsay, I was already doing it off label for those really refractory chronic migraine teenagers. The problem was getting insurance to cover it because it wasn't approved. So I thought really, really hard for a 17 year old. I really, really wanted to be able to get Botox approved. So by the time we got it approved, she turned 18. All that work, all those letters to the insurance company, but I remember it was such a struggle. But what a difference it made in her life.

#### Lindsay Weitzel, PhD:

I was going to bring that up, if you didn't, as a mother of a child with chronic migraine. Sometimes these studies are important not just because they tell us something we can do for our children, but they might help us get insurance to cover something we're already getting done for our child. Because that is such a struggle in pediatrics. It gives a reason for insurers to not pay if it hasn't been FDA approved in children. It is very helpful to have these studies. Thank you for bringing that up.

# Susan Hutchinson, MD:

Well, I've had countless parents want their children or adolescents come in for Botox over the years, but they couldn't afford it because, again, insurance companies often stand behind is it FDA approved in that population. So that's why this is an exciting time with more treatments that I think will be approved for this population.

# Lindsay Weitzel, PhD:

That is all the studies that I had listed to discuss, but I believe that you have one on your desk that is really new, is really awesome, and is related to a study we reported on in our last news episode.

# Susan Hutchinson, MD:

Yes. This is from a very important journal called Cephalalgia, and it's put out for the International Headache Society. This is international, but this was a group of researchers that said, let's look at all the pregnancy registries. Let's look at all the women that didn't know they were pregnant, but they were on one of the injectable monoclonal antibodies. Again, it could be a Aimovig, Emgality. It could be Ajovy. Because remember the half-life of these is 27 to 31 days, so they could be in the system for months.

The general consensus Lindsay has been to stop these injectables six months before you're trying to get pregnant. Well, that could be six months of migraine hell, because you're having a lot of migraines. Here's the reassuring thing. Even though the numbers are small, it's very reassuring that there was no signal of any adverse event. And what's also important is in the first trimester, and I just learned this from a leading Ob-Gyn at one at the headache conference we were just at, that the first trimester these monoclonal antibodies can't get into the placenta.

What does this mean? I think if you're a woman and you didn't know you were pregnant and you were on one of these monoclonal antibodies, the data is very reassuring. We don't have enough information to say they're safe during pregnancy, but perhaps we're going to be able to shorten that window where you don't have to stop them six months before you're trying to get pregnant.

# Lindsay Weitzel, PhD:

That is such important information. So reassuring for women who are either planning on getting pregnant sometime soon or who may have already gotten pregnant and didn't stop the antibody too long beforehand. And just for quick background, what Dr. Hutchinson is talking about is there are many molecules that we don't know until a lot of research has been done that are either are too large or are made up in a way where they are just they attract different types of molecules and they just don't cross that barrier into the placenta and get to your baby.

And that may be one of the things that we're learning about these molecules. And luckily now we have these awesome registries where we try to keep track of things like this in pregnancy. And I'm just so glad we have them because honestly, we have not been doing that that long. And it's just so helpful.

#### Susan Hutchinson, MD:

And you can't really do studies prospectively in pregnant patients because you wouldn't get approval for the review boards. So, the best way we learn about pregnancy is a woman that let's say didn't know she was pregnant. She was taking something, and it gets reported. Or in some cases, maybe the provider decides in this particular pregnant woman, the benefit outweighs the risk. And that provider continues.

Let's say it's an antidepressant. Maybe this woman has had a history of severe postpartum depression. But even that should be reported because I think there's underreporting, because providers think it's going to be a lot of work. And yet we need this data because then we can make better decisions. Because the reality is a lot of women that have migraine delay getting pregnant or they're afraid to get pregnant, and we want to try to help with that worry by looking at these registries. Because I think that can reassure women.

#### Lindsay Weitzel, PhD:

Thank you so much for all the insight you gave us today on this new research, these newly published studies. And we are so glad to have you. We cannot wait to have you back. And thank you everyone for listening in and watching today. And please join us on our next episode of Headwise. Bye-bye.

**Susan Hutchinson, MD:** Thank you.