HEAD Wise

Episode 256: Understanding Nausea and Vomiting with Migraine

Lindsay Weitzel, PhD:
Hello everyone and welcome to the video cast and podcast of the National Headache Foundation. I'm Dr. Lindsay Weitzel, and I have a history of chronic and daily migraine that began at the age of four. I'm excited to be here today with repeat guests and headache medicine specialist Dr. Fred Cohen. Hello, Dr. Cohen, how are you today?

Fred Cohen, MD:
I'm well, thank you for having me again.

Lindsay Weitzel, PhD:
Thank you for being here. Dr. Cohen is always so much fun to talk to, and he has so much information to give us. Our topic today is something that I do not think we discuss nearly enough in the headache community, nausea and vomiting in the setting of migraine. It can be very debilitating. It is inconvenient to say the least. And so, we're going to ask Dr. Cohen lots of questions so that we can understand it more. Dr. Cohen, let's just start with does everyone with migraine experience nausea and vomiting? How common do you think it is?

Fred Cohen, MD:
I would say it's very common. It's one of the common, what we call migraine associated symptoms, which are nausea, light sensitivity, sound sensitivity, smell sensitivity. But it's not needed, meaning there are many people who might not get nauseous with migraine. For myself, I'm a migraine sufferer, never trust a headache doctor that doesn't get headaches, maybe only 1 out of 10 of my migraine attacks do I get nauseous. There are people who get none of these symptoms, only the headache pain. There are people who get only these associated symptoms and not the headache. So, it could really present in various ways. You don't have to have nausea for it to be defined as migraine.

Lindsay Weitzel, PhD:
Yes, we love migraine because it is so weird. I think I'm going to go ahead and get a little bit into the why and how. Let's just talk about why this happens. Why do we get nauseous? Why do we vomit with migraine.

Fred Cohen, MD:
There's a couple of theories going on. Sort of the overarching thing is what's happening in a migraine attack. Think of a migraine attack as this one pathway in our head that's just over firing. And it leads to a concept called chronic sensitization, which is why we think the pain goes up slowly. These massive relay of signals can affect other areas of the brain. Nausea and vomiting is controlled by the

hypothalamus, the brainstem, so is it that these other areas are being affected as the migraine circuitry is going off. Is that the reason? Or is the release of GGRP and these other things, is that doing it? So, we don't have the exact reason why. But it is a thought that, okay, when you're having this over firing of the nervous system, that it's causing effect on other areas like the autonomic system and whatnot that give this feeling.

Lindsay Weitzel, PhD:
I think that in the migraine community, it's often, there's like a hand waving and they talk about something called gastric stasis. And we all experience migraine, nausea, and vomiting at different levels, etc. and this can seem very odd to some of us. Can you talk about gastric stasis? And then I want to talk about how all of us experience this a little differently.

Fred Cohen, MD:
You were asking the why, this is the how. We do know how is the nausea happening. We do know there's something called delayed gastric emptying. What that means is our stomach is always moving. It's called peristalsis. Every couple of seconds or whatever it's moving and that's how it moves food. Delayed gastric emptying is the opposite. Delay, it's not really moving. It's not doing its thing. We know this because there's been studies that have done what's called barium swallows on people with migraine. A barium swallow is when you swallow this contrast dye and they take X-rays. They see how the dye moves and they're like, the dye isn't moving, that's delayed emptying. So, we know in the migraine attack the gastric system is slowing down. It's not doing what it's supposed to do, hence nausea. Again, what part of the brain is exactly doing that, we don't know that, but we know it's happening. And again, just because you don't have nausea doesn't mean this isn't happening. It could be in asymptomatic individuals, but we know that's occurring.

Lindsay Weitzel, PhD:
So, this is one of the reasons that we are often advised that medications we take orally might not be absorbed as well as perhaps a nasal medication etc. during a migraine attack?

Fred Cohen, MD:
Correct. If it's not that for every individual I go straight to nasal. Let's say someone comes to me and an oral didn't work, then, yes, maybe you have a lot of delayed emptying and a nasal or injectable will do better.

Lindsay Weitzel, PhD:
I wanted to sort of address because I think one of the things that is disheartening to patients when we talk about this topic is there just is quite a wide spectrum of how people with migraine experience the vomiting and the nausea that is associated with it. And so, some people will vomit for extensive periods of time, hours, days. Some people will vomit once, and they feel better and their migraine goes away. And so, the gastric stasis example, it's so funny, I feel like it almost gives this visual to someone that doesn't understand it of a bird regurgitating its food for its baby. And it's not very satisfying to someone who vomits for days. Can you speak to those people who really have extreme vomiting with their migraine?

Fred Cohen, MD:
Yeah. Why do some people feel better after, and some don't. Think of it as vomiting is a defense mechanism of the body. The body thinks there's something bad in there and we got to expel it. So, when you vomit and you feel better. And you feel actually better. You almost feel great. And again, your body is like, good job, you did it. But sometimes for individuals, the body doesn't think the job is done and you still feel nauseous. So, it's different for everyone. It's just the body reacting. Yes, I have met patients who even after they vomit, they still feel very nauseous. Whereas someone like me, when I vomit, I felt better after. It doesn't indicate anything. And it is a wide again spectrum. Again, that's the hallmark of migraine. It affects people differently. There's no exact right answer for that. It doesn't, like for instance, I'll tell you, it doesn't change what I diagnose if someone tells you that. It doesn't indicate something else is wrong. That's just how your body is reacting.

Lindsay Weitzel, PhD:
Is nausea and vomiting one of those symptoms that people experience both interictally and ictally, in other words, in between migraine attacks and during the migraine attack, or is it usually something that's only experienced during migraine?

Fred Cohen, MD:
It can be felt in the first phases of a migraine prodrome. It doesn't have to be during the headache pain portion. It can be affected postdrome, what we call the migraine hangover. Absolutely. So yes, it can appear anywhere. Obviously most common during the headache pain phase, but it can appear before or after.

Lindsay Weitzel, PhD:
And how is it usually treated? What are our options? I know there's a couple medicines, a couple ways to take them, avenues of taking them.

Fred Cohen, MD:
So first and foremost, treat the migraine. For a lot of people that does the effect. Treat the migraine, the underlying problem is gone. For those that nausea is severe or it doesn't go away, we have sort of a hierarchy if you will. First there's ondansetron (Zofran) which is a very common nausea medication. Then we have Reglan (metoclopramide), which is think of a stronger version of that. And if those two fail, then we enter the neuroleptics. These are much more potent. I wouldn't call them first line because they have a higher side effect profile. They also make people tired. This is your Compazine, Phenergan, Zyprexa, Haldol. And all of these can be given for nausea. Again, starting with the least side effect heavy potent one which would be Zofran. It's very common. Many of my migraine patients have Zofran because hey, when nausea hits you have it. Like for instance, like almost all new patients I give a Zofran in script. You never have to use it. Fine. You get nausea, you got something to help you with. Then if they need something more potent, we go to those other medications.

Lindsay Weitzel, PhD:
You were talking about Zofran, and we were discussing how when you have a migraine or when you're nauseous, either you could vomit up some of your medicines or with a gastric stasis, they may not be absorbed. Well, do some of these medicines come in versions that you're more likely to absorb?

Fred Cohen, MD:
So yes, migraine medications can come in injectable, nasal, some come in disintegrating tablets so it's not as difficult to swallow. So, if an individual who they have a lot of nausea or the oral meds aren't working, I may say, hey, let's try a nasal spray. Let's try an injectable. You might fare better because yes, that delayed gastric emptying can be affecting it. Again, not everyone. I have many patients who do well on oral medications. It's not a this is how it works for everyone. But when someone is starting to fail meds, yes, we explore other routes.

Lindsay Weitzel, PhD:
And what about the medications that are specifically for nausea like the Zofran?

Fred Cohen, MD:
Zofran and Reglan, they come with the disintegrating versions. I believe some come in liquid as well. I don't think there's any injectable version of it.

Lindsay Weitzel, PhD:
The next thing I was going to ask is for those of us in the community that do experience pretty extreme vomiting episodes with migraine, we may have to go to the ER on occasion for that. That is one of the reasons for people with migraine having to go to the emergency department. What are the signs that you need to go there? And then once you're there, what can be done?

Fred Cohen, MD:
A lot can be done. The first question is, is it a headache attack that won't break or is there something more serious. If you have nausea for several days in a row, that's the reason to seek help. If you vomit a lot, you could have tears, you're stressing your esophagus out and that could cause bleeding. If there's blood in your vomit, you need to go to the ER. If you're vomiting so much that after a while you can't hold liquid down, you could be dehydrated. That can be very dangerous. What can they do for you? They could obviously give you IV medication, IV fluids, a lot of stuff. If they have to do an intervention, a gastroenterologist has to get involved. But if you vomit once, that does that mean you have to go, but if other if other severe symptoms come up, a lot of stomach pain, fever, etc., that could be a reason.

Lindsay Weitzel, PhD:
Is there anything else you'd like to add to the topic of migraine related nausea and vomiting before we go today?

Fred Cohen, MD:
If you suffer from these things, talk about it with your provider. A lot of providers focus just on the headache pain. Migraine is more than just a headache. All these associated symptoms, even the light and sound sensitivity and of course nausea, there's medication for it like the medication I listed today. A lot of times when I talk to patients they'll tell me, oh yeah, my headache's much better. But when I then talk more, what about the nausea? Yeah, it's still bothers me. Well, you could do something about it. So, these symptoms matter too. Migraine is a collection of different things, not just the headache pain. Be sure to talk to your provider.

Lindsay Weitzel, PhD:
Thank you, Dr. Cohen. And thank you for being with us again today.

Fred Cohen, MD:
Thank you.

Lindsay Weitzel, PhD:
Thank you, everyone for joining. Please join us again for our next episode of HeadWise. Bye bye.

This episode is for educational purposes only and is not intended to provide medical advice. Please consult your healthcare provider regarding your individual symptoms and treatment options.

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