

Matt (host): Welcome back to the Nimble Youth Podcast, where we explore the emotional and mental health challenges facing children and teens and equip families with tools to respond with confidence and compassion. Today we're talking about something incredibly common, but often misunderstood: stress related headaches in young people. Here's what may surprise you: Research shows that nearly one in five children experience recurrent headaches and by adolescents that number climbs significantly. The American Migraine Foundation reports that by age 15, up to seventy five percent of children will have had at least one significant headache and many of those are closely linked to stress, anxiety, sleep disruption, and academic pressure. In a world where kids are navigating academic demands, social media, extracurricular overload, and often unspoken emotional stress, headaches can become one of the body's loudest signals that something deeper is going on.

Today, we'll unpack how stress manifests physically in children and teens, how to recognize when headaches may be emotionally driven, and what parents can do to help their child find relief, both physically and psychologically. To help us unpack this, I'm joined by Doctor. Gretchen Hoyle. Doctor Hoyle is a pediatrician with twenty five years of experience and a special focus on youth mental health.

And before we start, we remind you that this podcast is intended for informational purposes only and does not substitute for medical advice may qualify a mental health or medical provider. Please do visit a healthcare professional with any questions about your child's mental health. So Doctor. Hoyle, this is something you see often in your clinic, isn't it?

Dr. Gretchen Hoyle: Absolutely. So headaches are incredibly common in kids and teens. And the first thing I want to always say is that headaches deserve a medical evaluation. So you need a medical workup for this. We don't just go ahead and jump to the idea that this is stress.

We need to rule out some other things first. And typically the elephant in the room about headaches is that, know, does my kid have a brain tumor? And I'm like, okay, well, there are some very like helpful things to think about to try to roll that out. And so the reason that a brain tumor would cause headache is that there's mass effect. So as the mass gets bigger and the fixed space within the skull, that that's going to cause pain if that, if there's something that's causing pressure and mass effect there.

And so the good news is that that is an extremely rare thing in children, but it does happen. And, but often like really careful neurologic exam and a lot of thoughtful follow-up are pretty good at ruling that out. The historical elements that we want to like take specific note of for kids is that we have people who are having progressive worsening of their headaches. And it's not even necessarily so much those intermittent or episodic as that you sort of start having a headache and like, just never really lets up. When kiddos who have early morning vomiting is a big red flag.

That is an indication of increased intracranial pressure. And so that's a big red flag as well. And if a headache wakes up a child from sleep, that's a red flag. And then if they actually have

findings on their neurologic exam. So when we see a kid with headaches, we're going to do a neurologic exam.

We're going to check out their cranial nerves. So all the nerves that control like your vision and hearing and sensory of your face and all the muscles that are in your face and all the different like muscle groups, like the large groups of muscles in your body. And then we're going to potentially like check out your cerebellar function with some tests that make sure that all that is okay. And so we can learn a lot from a good neurologic exam. And so if all that is looking normal and we don't have any other red flag things, then typically we can start thinking about sources of like, headache that are in this family of just either migraine or tension headache, along those lines.

Matt (host): So often asked, what's the difference between a migraine and just a regular headache? That's probably a question I would ask you as well, because I'm not sure I can articulate the difference.

Dr. Gretchen Hoyle: Right. And I'll just, full disclosure, I'm not a neurologist and I just want to like clarify that, like, I do see a lot of people with headaches. It's I'm kind of in the, like, as a primary care physician, I'm like, okay, well, I've heard this story before. I feel comfortable with this exam. And then once we're outside of that, I'm like, okay, well, we ain't gonna see the specialists.

Right. So, but the majority of the time, I will see is kids know, headaches, there are definitely a subset of those kids who have migraines. There's a lot of discussion about whether migraines are categorically different from tension headaches or whether they're just a severity on the same continuum, but just more severe. But generally speaking, migraines are considered to be a specific neurologic condition. And this is based on an international diagnostic criteria.

They tend to be moderate to severe. They're often throbbing in nature. They can last four to seventy two hours, which is of course an enormous amount of time for people to have serious headache symptoms. There's often some additional neurologic symptoms that go along with it. So people will have nausea, a common one, light sensitivity, or also call that photophobia, or sound sensitivity.

Also, will find that especially for kids where we ultimately get a diagnosis of migraines, whether that's coming from me or from a neurologist, there's usually some family history involved. It does tend to be running in families. A lot times the migraines will have something called an aura, which is a sort of a bleed up symptom that tells somebody that the migraine is getting ready to come on. And so the most common thing for that is like visual changes, sort of like those sort of flashing lights in their visual field or zig zaggy lines, or they have a blind spot in their visual field. And this is sort of leading up to the headache and then the headache begins.

And then overall for migraines, it's pretty common. So about eight to twelve percent of adolescents will experience migraines at some point. And they're a little more common in girls than boys. Sometimes there seems to be some relation to like their monthly cycle as well, but

it's, it's pretty common. And then tension headaches are sort of the other category that we'll think about.

And so they're usually milder. They feel more like there's a band that's sort of squeezing around your head, like around your forehead and kind of around this part. And they aren't typically associated with a lot of the other like nausea kinds of symptoms. And so we'll either call it migraines or call it tension headache. Sometimes people will have already described it as a specific type of headache, and sometimes they've seen a neurologist and have already got a diagnosis of that they have migraines.

But what I often see with this in context is that the triggers for the events, for these events. So whether there is attention, headache, migraines is that the triggers tend to overlap. And so they're typically brought on by sort of what we call lifestyle triggers. Sleep is probably the most common thing that I see that is disrupted in kids who have trouble with this. Now sleep has disrupted in a lot of people.

Like it's a real, like it's a major problem right now for people in adolescence, but it often will build into a pretty severe headache, tension headachemigraine for these kids. Dehydration can play a role. A lot of kids will skip meals if they're super busy. They'll like caffeine and like how much caffeine they're getting in. Then if their body's used to getting caffeine at a certain time and then they don't get it, they'll get a headache.

Stress is certainly like emotional stress is in the for sure. A lot of screen time tends to be correlated and these kinds of factors are precipitating factors for both migraines and for tension headaches. And they're the kinds of things that a lot of kids are experiencing. Headaches are really common

Matt (host): with that. So you see a very specific pattern in middle and high schoolers.

Dr. Gretchen Hoyle: Right. Yeah. So, so this is how this typically goes down in clinic. So, I will hear this story where it's a kid who like has been prone to headaches in the past. Like it was almost like if something is dysregulated in their body, then they will often present with a headache.

And so they prone to it. They were prone to it. Like say, if I ask, well, what was this like six or twelve months ago? And they're like, oh, well they might get one maybe once or twice a month at the most. Right.

And then they're usually coming into me when they are starting to get them more frequent. So now they're getting them like a couple of times a week. Sometimes they're having them every day. And the most common pattern for this is that they wake up and they typically do not start the day with a headache. Cause remember like starting the day with a headache makes me nervous.

And I typically will want to work that up, but they're waking up okay. But then the headache sort of starts coming on for them sometime during the school day and it builds throughout the school day and then into the afternoon. And by the time there's time for them to go home from school, they have, you know, really having a lot of headache and sometimes they will have to call their parent to come pick them up from school because it's so disruptive. And so a lot of times by the time they get home, they're like, oh, the only way is this going to clear is that I'm going to take a nap. And so they'll take a nap and they'll try to sleep it off.

And so they may do that for a couple of hours. And then like they, that may alleviate their headache, but then they can't fall asleep that night and then their sleep becomes disrupted again. And so then they're getting to this cycle where they're not getting enough overall sleep, sleep that is happening when the sun is out. So like if you go home from school and take a nap in the afternoon and it's during the day is not as restful for your brain as it is if you're getting it when it's dark outside and you're supposed to be asleep. And so it's just not a good quality.

And so they will start sort of trading a couple of hours of sleep for a nap in the afternoon. And then they won't go to bed till like 01:30 or two in the morning. And they're supposed to get up at six and it just like, they never get caught back up. And yeah. And so then this gets into a real cycle.

And then as far as like the actual trigger for the, like what, so you kind of have that as sort of their baseline is that they were sort of dysregulated already because they're not sleeping well. And it's this sort of self-fulfilling cycle perpetuating cycle. But then there's often like a specific trigger that's happening during their school day. So there's a class that they're really struggling with, or like a teacher that they just do not go along with, or there's somebody that's pulling them in some part of their school day. It just builds over time until they get into this pattern of this sort of daily or almost daily headache.

And it's just really super draining for them. And then it just starts to become dysfunctional because they're just having trouble going to school, making it through the school day, doing all their, like the things that they need to do. And a lot of times it's really like, just, I feel the sense is that their nervous system is just sort of overwhelmed and they're kind of like in fight or flight a lot. They have like their, those fight or flight chemicals and hormones like adrenaline and cortisol. Those levels are coming up and then that sort of affects the muscles in the scalp and the neck.

And then it can also affect like your blood vessels and those will like, you know, get dysregulated. So they're constricting or dilating when they're not really supposed to. And then once, once you get into that pattern, so you've got this sleep stuff and then you get this autonomic dysfunction and that all kind of gets together to where, you know, people will have these pretty much daily headaches, like, and it's just a, it's a pretty constant problem. It's starting to really interfere with their lives. And that is the scenario that I hear the most in clinic.

Matt (host): Your patients will fall into this cycle and how do you, how do you break it? How do you get out of

Dr. Gretchen Hoyle: Right. So the first thing is to try to fix their sleep problems. And that is really challenging because they're just not going to get better until that gets back on track. And, and so, like I said, like every feels like at least half of these podcasts is that they should not have their phone at night because they just cannot, like for most adults, you know, it's hard for us to resist engaging with the phone at night, especially if we're like, oh, it's not, I'm having a hard time falling asleep. The worst thing you can do is grab your phone because it just elevates the dopamine in the front part of your brain.

And we're all like, oh, I'll do this until I feel sleepy. And in reality, that is just not, that's not a good idea. Like that it just opens, it wakes up your brain so much and the, the light from the screen and whatever activity you pick to do, you're going to pick to do something that's interesting. And so that's going to keep you engaged and awake and the dopamine is going to like be elevated and it's just going to make the problem worse. So you really do need to be, especially for kids, separated from that phone at night.

And then like we really do want to work on hydration. And so, you know, we'll talk about this in subsequent podcasts, but keeping the tank full. So by the tank, I mean, like your blood volume in your body, you want to make sure that there is enough hydration there so that your vascular system is able to make sure that like when you change position, there's enough blood to go up into your head and doesn't make you feel weak or dizzy or headachy. And then having protein in the morning is a really helpful thing for a lot of people. People like there's so many kids that do not eat breakfast at all.

And if they do, they're having like a pop tart and you're like, well, better than nothing, I guess, but you do really need to get some protein in the morning because it sticks with you better. And then being able to eat at lunch, just regular, like meals that are on a somewhat of a predictable schedule for your body. It tells your body that things are okay. And it helps kind of keep your cortisol level down, make it so that you're not like concerned that your body, your automatic nervous system is able to know what to expect and that is calming for your system. And so when it's all super chaotic, where you're like not sleeping well enough, or you're like not eating and or then you eat stuff that's not good for you.

I mean, all the things that we're supposed to do as adults to help take care of our bodies. And most of the time, the thing about adulthood, as we know, is that like, if you try to do stuff like stay up really late or skip breakfast or whatever, I mean, like we get sort of like immediate feedback from our bodies as, as no, you can't do that. But for kids, they'll try to push through it a lot. And so a lot of times it'll push people sort of show up in these kinds of symptoms like the headache and stuff. And so, so a lot of lifestyle things.

We'll talk a lot about that. There's pretty good evidence that, that magnesium supplementation is actually kind of helpful. And so I will tell folks that we're trying that. There are a lot of products

out there that, sort of like connect headache and sleep and magnesium as a way to calm the nervous system. And so there's, well, there are lots of over the counter options for that.

Some of them come in a gummy variety and those can be helpful. I've had a lot of really good success with that. Sometimes as far as like for medications, for migraines, we will use NSAIDs like Somotrin, but you can get this rebound headache with a lot of NSAID use. You want to be careful with that. There's a class of medicines called the triptans like sumatriptan or rizatriptan, and those are approved for what's good to be a certain age.

And those are medications that are used to help like abort acute migraines or acute headaches. And so they are like a rescue medicine. Once you have your, ideally you're going to get in like, like right at the beginning of the headache and that can kind of turn it off. And so that's a whole class of medicines and they can be quite effective. Then there are some kids where their headaches are so frequent that if you're having this a couple of times a week, then you're like, then this, that's a pretty disruptive.

So a lot of times we'll start thinking about, well, can we put you on a preventative medicine? I'll tell folks this is very similar to like asthma care, where a lot of people who have asthma, they'll have their rescue inhaler for when they're wheezing, but then they'll be on a preventive medicine, like all through cold and flu season so that they don't have, they can, we can reduce the inflammation that's in their airways. And so they're less likely to get tight and have, have wheezing. And so they won't need their rescue inhaler as much. So kind of the same idea here, the rescue inhaler and this metaphor is the medicine that we use to help with acute migraines.

But we can use like a preventive medicine. Like sometimes Propranolol is one that we use. That one's the one that is a beta blocker. So it helps sort of regulate your vascular tone. And then there's one called imipramine, which is classically sort of an antidepressant, anti anxiety medicine.

And so those things we can put, often fairly low doses that people will take every day. And it can make a huge difference in their frequency of their, it's frequency and severity and intensity of their headaches. And so all of those things are really helpful to do, but like sort of underneath all that, I feel like when I'll explain this to people, I do feel like headaches are often a marker of like anxiety driven autonomic dysregulation. And so if you think about like, we have a nervous system that we control consciously, and then we have sort of an automatic or sometimes called the autonomic nervous system where we are not having to really think about that. Like if you had to think about, like I have to consciously tell my brain to tell my heart to keep beating or breathing in and out or regulating the vasculature in my body so that when I change position, I don't like lose blood supply to my head.

I mean, those are all things that we don't have to think about. That's all controlled by our brain at a lower level that we're not conscious of. But when that autonomic nervous system gets dysregulated and a lot of times anxiety will do that because anxiety is talking to our adrenal glands. That's where we get the, like the word adrenaline comes from adrenal glands and that's

that fight or flight hormone. And so anxiety will activate that and it dysregulates our nervous system, the automatic nervous system or the autonomic nervous system.

And headaches really do like often are a reflection of that dysregulation. And so we want to manage the anxiety underneath. And oftentimes when we kind of address these things, like in concert, like a lot of times I'll have kids where I'm like, oh, so you, you have these really frequent headaches that's starting to really disruptive. We're going to do something to help reduce that from happening. But underneath that, we're going to do some questionnaires again, like we've talked about in the past about like trying to figure out if you have, you know, we can quantify what is going on with you anxiety wise, and if that's really, really high, then a lot of times managing the anxiety will also make it so that the frequency of the headaches will improve.

We may not need to be on a preventive medicine all the time. This is not true for everybody. There are definitely people who, even though they are managing anxiety well, or they may not really have a whole lot of baseline anxiety, they still have headaches. And so this is not like all the time, like not everybody's headaches are from anxiety. For sure.

That's for sure. And so we have to sort of figure that out, but I, I see this so often and so much that, and managing it from that perspective is often so helpful that it's, I think something that I think is worth conceptualizing a lot of times for parents. Once we've kind of gone through the workup for headaches to make sure we've rolled out the things that we are most afraid of. And then we start dealing with whatever lifestyle changes we can make to improve symptoms and then using some medicines to help with the headaches themselves and potentially to treat the anxiety. And then also all of the good coping skills that we talked about in the past about how to help kids if they're having sort of acute anxiety to make it so that, that those, that fight or flight autonomic triggers that are happening in their body are not turning into these, what we call somatic symptoms.

So soma just means body. And so the idea that you want to like keep things from turning into physical pain, keep like anxiety or autonomic dis- dysregulation from turning into physical pain. That's a big part of like learning to regulate in a way that keeps your autonomic nervous system functional.

Matt (host): Over here. The bottom line is it's not, it's not just stress, but the stress is a factor in, in whether the headaches will manifest themselves.

Dr. Gretchen Hoyle: I think so. Yeah, absolutely. And that's true for the, like really the majority of people. So even people who have like, you know, they have this like major family history of migraines and they've got all of the sort of like secondary symptoms of migraines, they've got like the nausea and the photophobia and all those things. Even those kinds of classic stuff, this like stress and anxiety makes it like more of a problem.

And so we do want to manage that and maximize their care for that as much as possible. And so so that the other strategies that we potentially are going to use will, will work. And of course

there are people, the neurology folks they'll spend, you know, there's folks who they, they will spend their, their all day taking care of people with headaches. And I mean, hats off to them because it is a really hard thing to do, to sort of sort out like what the origin is and what's the best thing to do about them. I mean, I get help from the neurologist a lot all the time, as far as like, can you make sure that this is not something else that we need to evaluate?

There are also a lot of new modalities that are out there to help with headaches, but I will say that if your kid is sleeping five hours a night, then oftentimes that is the first thing that we should do to address it. And there are lots of kids that are sleeping that amount of time or less. So, and they often won't admit to that, but it's so like common that if we address that issue, then a lot of these things will get better.

Matt (host): It's gonna be the body's early warning system. But if we listen carefully to them, they often tell us where the growth needs to happen. And that kind of mind body connection is a good time for us to talk a little bit about your new practice, MindBridge Behavioral Health, which is opening in July 2026 here in the Piedmont Triad area of North Carolina. Can you tell us a little bit about it, Doctor. Hoyle?

Dr. Gretchen Hoyle: Sure. So our new practice is going to be like mental health for people ages like five to 22. And it's mental health from a pediatrics perspective. And so what that means is I'm a general pediatrician and I've been doing general pediatrics for twenty five years. I'm going to step away from doing things like well checks or sick visits for care of other chronic conditions and just focus on mental and behavioral health, there's just a huge need for it.

There is some overlap in the model that I'm doing, which is somewhat similar to what maybe a psychiatrist would do. Of course, I'm not a psychiatrist, but there are lots of benefits to being able to spend, like for me, to be able to spend a significant amount of time with patients and being able to do that without like needing to keep up the pace that is required in general pediatrics, I think is going to be really helpful. So that allows me to get more information and more history, spend more time, do more like counseling and stuff. Then also we're going to incorporate the collaborative care model in this, which is, I think, really helpful in helping just the environment around kids who have different struggles, whether that be anxiety or ADHD, or they may be having some sort of physical problem that is being, you know, is a manifestation of their anxiety. And so you'll have a sort of a team in place to help things get better and, and that a lot of that getting better.

So you think to yourself, like the example of somebody who's got headaches, like, okay, well, we need to deal with the bully or change the teacher or change the class or do something like that. And in reality, most of the time that those, there are some situations in which that's appropriate, but there is a lot of times what we're trying to do is give kids the coping skills in order to solve their own problems in the moment so that it doesn't then turn into a physical manifestation of anxiety. And so that's a lot of what our program is going to do. Our behavioral healthcare managers are going to work with families and kids to develop those coping skills that allow you to manage your acute anxiety and be able to just cope with the world. And of course

that is where we don't want to necessarily, again, it's like, like the idea of, of you want to put on slippers or carpet the whole world, and we're going to put on slippers and help that kid figure out how they can cope with the situation that's causing them distress because there's a life skill and there's an opportunity for growth.

And and that's really the type of interventions that we're wanting to really provide for our patients. Along with the sort of traditional medical management that I've been doing along with like what the type of things that I've been talking about in previous podcasts about managing people's ADHD and anxiety and depression in different conditions with medicine, which is definitely a very helpful tool in our toolbox. But it's only part of the picture for most people. You need some of these other skills and potentially a specialist and therapists and that type of thing to get fully better, especially during adolescence, because this is a very often is a fairly tumultuous time and lots of things are changing. And so we're wanting to find our way to a sort of a balance where that child and that adolescent's sort of internal experience is peaceful so that their external progress can be made towards independence.

Matt (host): So you can find more information at the practice's website, which is MindBridge Behavioral Health. Is actually a form if you want to put your name on the registry list. Be scheduling appointments coming up as our announced date becomes sooner, closer. Mindbridgebehavioralhealthbut.com. Thank you for joining us today on the Nimble Youth Podcast.

And you find show notes and links at our website. And that one is nimbleyouthpodcast.com. Until next time, please take care of yourselves and the young people in your lives. Bye for now.