



## Episode 252: Headache Location

### **Lindsay Weitzel, PhD:**

Hello everyone, and welcome to HeadWise, the video cast and podcast of the National Headache Foundation. I'm Dr. Lindsay Weitzel and I have had a history of chronic and daily migraine that began at the age of four. I am excited to be here today with a repeat guest who we all know and love. I am here with headache medicine specialist Dr. Fred Cohen. Hi, Dr. Cohen, how are you today?

### **Fred Cohen, MD:**

I'm well. Thanks for having me again.

### **Lindsay Weitzel, PhD:**

Thank you for being here. Dr. Cohen is the director of Headache Intervention in New York City. He is also an assistant professor at Icahn School of Medicine at Mount Sinai. We have a really cool thing that we're going to do today. We are going to talk about something that people ask about all the time. They always want to know, if I have a headache in a certain area of my head, what could that be? What could that mean? What different types of headache could that be?

We're going to go ahead and just jump in. I'm literally going to describe an area of the head where we commonly manifest head pain, and Dr. Cohen is going to tell us the different types of headache that occur there and perhaps give us some hints about how we might be able to tell the difference between those types. Dr. Cohen, let's start with one of the most common head pain locations we discuss on HeadWise. What types of headache occur unilaterally or on just one side of our head?

### **Fred Cohen, MD:**

A very common headache I am going to be talking about is migraine. Migraine typically presents one side or unilaterally but doesn't have to. Migraine can really appear anywhere in the head. The main actual criteria for migraine is duration and sort of the feeling, meaning like throbbing, pulsating, lasting at least four hours. But otherwise, there are other headache types, but you're going to hear me saying migraine a lot.

When it comes to one-sided, if a headache is always locked one-sided, besides migraine sometimes you may think about what's called hemicrania continua, which is another kind of primary headache. We typically see when someone tells me when they go to their neurologist or doctor and they've tried all these migraine remedies, and nothing has helped. But they mentioned that it's always my left, it's always my right, and that's when that kind of headache starts going on my radar. Sometimes we see it with this area, the temporalis muscle, that if there's stress or pain with that. It could be lock sided on one, but it is the classic picture of migraine.

**Lindsay Weitzel, PhD:**

How about pressure, for example like in the front of your face?

**Fred Cohen, MD:**

Sinus questions come up all the time. One question that's always on the headache boards every year is someone coming in with what they call a sinus headache and is actually migraine. Now, if you're having pain here, most of my patients, if they're not already seen, they get evaluated by an ENT, make sure it's not sinusitis or whatnot, but it can be migraine.

Now sinusitis, inflammation of the sinus, can absolutely cause pain. So that's why we got to make sure it's not that. But that's a very easy thing to find out. ENT will put a scope in your nose. They'll visually see if it is inflamed or not. If they tell you all is good, then it could just either be a tension headache or a migraine. The quality of the pain is really going to matter more. If it's a more constant pain, that hints to migraine. If it's more like a shock, maybe very quick pain, that can be something called trigeminal neuralgia.

**Lindsay Weitzel, PhD:**

Can you get trigeminal neuralgia on both sides?

**Fred Cohen, MD:**

It's very uncommon. So trigeminal neuralgia, hence the Latin of it is the trigeminal nerve, is the sensation of the front half of our head. So trigeminal neuralgia means the trigeminal nerve is inflamed. Usually one nerve is inflamed, one side. It's very, very unusual for both to be inflamed. The main cause of trigeminal neuralgia, half the cases, is something is pressing on it, typically a blood vessel. It should always get imaging because 30% of the time it can be a mess. I've had found multiple sclerosis in people who are presenting with trigeminal neuralgia symptoms. But there is 20 % of those that also it's just happening, what we call idiopathic, there's no reason a nerve is just firing. Have I seen bilateral trigeminal neuralgia? Yes, but it is very uncommon

**Lindsay Weitzel, PhD:**

This is a common one. What can it mean if your head pain is sort of like in a band around your head.

**Fred Cohen, MD:**

So that's the hot word, the sort of textbook example of a tension headache, the band around the head. Tension headache is the most common kind of headache. We call that the typical headache. Typically, it's a mild to moderate pain. It's not worse when moving. You don't have what we call the migraine associated symptoms like light or sound sensitivity or nausea. And it can come from either stress, muscle ache. What we think it is, is that, again, something is causing inflammation or stress in that area. And then the muscles could think of clenching and that's why it has that band sort of appearance. Again, the big differentiator between a tension-type headache and a migraine is the severity and those

associated symptoms. If you tell me, oh yeah, it's 8 or 9 out of 10. It's that bad. It's not tension. Tension is not going to affect you like that, and tension is not going to give you light sensitivity.

**Lindsay Weitzel, PhD:**

Is that the only way tension headache presents? Does it always present in the band? Is there other ways, other places it can hurt, just in the front or?

**Fred Cohen, MD:**

It doesn't have to, same thing with migraine. Again the location is not super defined. It's again, the common way it does present is that kind of location. But what I as a specialist care more is the quality. Someone tells me, hey, I get 10 times a month this headache that's 3 out of 10. It's frequent. It's not stopping me from going about my day, but it's annoying. I'm leaning towards tension. Versus if someone tells me they have a band like headache, but again, it's 9 out of 10. It's pulsating. It really stops you from doing what I'm doing, then I'm leaning towards migraine.

**Lindsay Weitzel, PhD:**

Is there a specific type of headache where the pain is behind both eyes?

**Fred Cohen, MD:**

So no, again, that's a common migraine spot. It's not I would say something super specific. What I will ask my patients is what other symptoms are you having? Are there visual issues? And I'm not talking blurred vision, double vision, blind spots, meaning is this a problem of the eyeball. In migraine, people say it feels like something is piercing their eye, their eye is going to pop out. There's nothing wrong with the eye. But if someone tells me I'm having pain behind my eyes, but I see double, hold up, that could be something different. Is there too much pressure in the eye, glaucoma? It may need to be seen by an ophthalmologist for testing. I don't assume it's migraine. I always ask those other accompanying questions to make sure that this isn't some other ocular issue.

**Lindsay Weitzel, PhD:**

This is just a little different. What if you have pain just behind one eye? Is that a specific type of headache and does it vary based on the severity of the headache?

**Fred Cohen, MD:**

One eye or both eyes, that doesn't really change it too much. Again, the first thing that's come to me is, is there some kind of visual problem? I'll give you an example. Optic neuritis can have pain. If someone tells me in that eye, that'd be inflammation of the optic nerve, they have a blind spot. If someone's coming to me with besides blurred vision, because when you're in pain, you're going to have blurred vision. But if you're telling me, you can't see out of the eye, you can't see half out of the eye, you're seeing double, there's something going on in the visual field, then we got to make sure that it's not an ocular problem. But if there's no other neurological symptoms or vision symptoms, that could be migraine. That would be typically what it would probably be. But we got again to make sure nothing else is happening behind the scenes.

**Lindsay Weitzel, PhD:**

If someone were to say that their pain was behind only one eye, but it was extremely severe, short lasting, is that more of a cluster headache?

**Fred Cohen, MD:**

So, this is where timing comes in. Duration, like I was saying before, is really one of the most key factors for diagnosing a headache. Cluster is usually 15 minutes to 3 hours long. It's described as a very severe pain, and it's typically quick. So again, we're going about the quality of the pain. Migraine and tension, it's slow. Cluster's going to come in immediately, and typically with other symptoms: tearing, congestion of the nose can be there, sort of swelling of the face. So, to give an example to bring it up one eye, if someone says, yeah, I have a pain behind my eye. It feels like it's my eyeball, but it came on slowly and lasted 7 hours. I'm leaning towards migraine. If you tell me, it was sudden, really severe, and lasted half an hour, now it's cluster. So, it's again, the timing is everything. And I'll make this as my pitch, always keep a headache diary, because we're human. We're not computers where we remember everything. And it could be difficult to remember those specific questions when you're in pain. So, I tell my patients that when the headache subsides right after, jot it down, okay. How long did it last. Because those timing details, if you unfortunately come to the visit and you tell me, I'm not sure, then I can't come to a more definitive diagnosis.

**Lindsay Weitzel, PhD:**

Let's move on to what if someone comes in and tells you that they have head pain in the back of their head. What does that mean to you?

**Fred Cohen, MD:**

So, when people come in with headache towards the occipital area, they always look online and think it's occipital neuralgia. I get asked that all the time. Occipital neuralgia presents like trigeminal neuralgia, but now we're in the back half of the head, not the front half. And again, those are usually shocks. If they're not shock, quick zaps, then no, I don't think it's occipital neuralgia. A lot of these times it's migraine. People say like, oh yeah, I'm having a pulsating pain, a very strong pain in the back of my head. It's like, you don't need to have it in the front. Migraine can be in the back.

But also, it can be muscular, what we call cervicogenic headache. I have my handy assistant here. We're going to use a head. So, this is the occipital, suboccipital area. Now, cervicogenic headache, latter being cervical generated, the muscles of the head, this area, they're connected like pulleys to our cervical paraspinal muscles, trapezius, semispinalis, splenius capitis, etc. When this area is inflamed or angry, it pulls and it pulls. And that's why actually I've met people who they have headache, we're going go back to the band like presentation, they have headache they told me here, but it actually could be an issue with the neck pulling. Another part that going to where areas could pull, going to the band like, is the masseter muscle, the jaw. If you've ever heard of TMJ issues, TMD, your jaw muscle if it's very engaged, if it's overactive, it can be pulling down. And the masseter, this is the site of attachment, it pulls here and it could feel like it's doing this. So, it's when people bring up sort of locations, I start asking those sort of expanding questions. Because there are times people come in, they think it's one headache, and

the next thing you know I'm diagnosing a neck, a muscular issue in the neck, or an issue with the jaw. It can be tied to other areas like that.

**Lindsay Weitzel, PhD:**

I'll go ahead and ask since you brought this up, what if someone comes in with pain on both sides of the head?

**Fred Cohen, MD:**

If someone comes with both sides of the head, this could be numerous different kinds of headache besides migraine, tension-type, jaw. It's going to be a lot of accompanying questions, where the pain is happening. Sort of obvious things is after a meal, after chewing, it's going to make me think of TMJ. If it's going to be later in the day, maybe it's with exertion versus early in the morning. The quality, a dull versus throbbing pulsating pain, because this is a pretty broad category, so these specific questions are going to help me to sort of hone into what kind of headache we're dealing with. Is this muscular related or is this migraine or something like that.

**Lindsay Weitzel, PhD:**

The next one I wanted to ask about is when someone talks about having pain or pressure right on top of their head. I hear that sometimes. What could that be?

**Fred Cohen, MD:**

The radius if you will, the how wide, is going to really matter. Again, migraine can fit into this. This can be some kind of other neuralgia but also it can be what we call nummular headache. A nummular headache, so I'm going to describe it like this because when someone says that I say take your finger and outline the area. Because if they do a small area, not huge, but they just do a small area, that can be what we call a nummular headache, which is literally a small radius that's there. It typically does present in the scalp. It can be anywhere. I've had people that have it on the side, but generally we see it on the top of the head. It can be that. Now the trigeminal nerve does have innervation up here. So, this could up here be trigeminal neuralgia. It's not as common. Usually it's here, but the location of the pain on the scalp and the quality is going to matter about that. But yeah, not a lot of people have heard about a nummular headache.

**Lindsay Weitzel, PhD:**

So that's just in one spot, right?

**Fred Cohen, MD:**

Correct. One spot.

**Lindsay Weitzel, PhD:**

What if someone comes in and says that they have pain and feel stabbing in various locations of their head?

**Fred Cohen, MD:**

This is the big differentiator between trigeminal neuralgia and primary stabbing headache. Trigeminal neuralgia is a repeating pattern. It's typically in the same spot, because again, going to the root of it, the nerve itself is firing off in a certain area. It doesn't bob around. When someone tells me it's going left, right, left, right, that's more unlikely to be it. Primary stabbing headache is typically that, sort of this bouncing around, stabbing like pain. Older terms or ice pick headache, we don't use that anymore. Primary stabbing is the term. But also, sometimes this could also be confused for SUNCT and SUNA, which are headaches that, now, this is again, duration is key. Primary stabbing and trigeminal neuralgia is quick zaps. These could be up to five, six minutes. And so, timing is key with that. But it could be in those areas as well.

**Lindsay Weitzel, PhD:**

That is interesting. Are there any types of headache you can think of that we should talk about based on location that we missed?

**Fred Cohen, MD:**

The main one I want to harp back on is sinus related stuff. It's really common that these get referred by ENT to me, because these patients keep going to ENT. They are convinced I need antibiotics again. I'm having sinusitis, and the ENT is like, ah, this shouldn't keep coming back. And they come to me and it's like, hey, you're having migraine. Migraine can cause autonomic symptoms. Autonomic symptoms can be nasal congestion and runny nose. You can get that in a migraine attack. And again, an ENT will let you know that because they go tell you, I don't really see much inflammation. And generally, that's their hint that no, this is something else and it could be migraine.

**Lindsay Weitzel, PhD:**

That is so interesting. I love that fact. I think we need to get that fact out there as much as possible. So, thank you so much for being here and answering all these questions.

**Fred Cohen, MD:**

My pleasure.

**Lindsay Weitzel, PhD:**

Thank you everyone for tuning in and join us again for the next episode of HeadWise. Bye-bye.