MIGRAINE WORLD SUMMIT

# TRANSCRIPT

INTERVIEWS WITH WORLD-LEADING EXPERTS

FINDING MIGRAINE RELIEF

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**Introduction** (00:05): So what is most important is actually a good physiotherapist, because whatever the neck pain is, it's very common that people will submit to passive approaches like osteopathy or chiropractic medicine, which can help. But doing exercises and working on your posture — strengthening muscles, not only stretching them — is key. And if a muscle is painful, very often it's because it's weak. So I've learned that instead of spending a thousand bucks on an MRI, maybe you should invest in a physiotherapist that will actually escort you and teach you exercises that you will use for spine health, and what I call neck maintenance, for the rest of your life, really.

**Kellie Pokrifka** (00:49): So, the one question everyone with migraine has is, "How do I get relief? What is actually going to help me, and how do I secure that?" I think one of the best, most exciting parts of this interview is we're not only getting what we want to hear, we're getting one of the top experts. We're getting to hear what she wants us to hear, what she's learned from so many years of her practice, and what she thinks will be most useful for us. So, Dr. Elizabeth Leroux, headache specialist and neurologist, welcome back to the Migraine World Summit.

**Dr. Leroux** (01:18): It's a real pleasure to be here.

**Kellie Pokrifka** (01:21): OK, so please tell me: What are acute medications, and what treatment options fall under that?

**Dr. Leroux** (01:27): So, acute medications are what we use as needed to break an ongoing migraine attack. And we have different classes that people can use. Of course, this will vary a little bit between different countries, but usually people will start with anti-inflammatories — so that would include things like Advil, naproxen, and so on. Then triptans — that can be a game changer for people with migraine. There are seven of them; different formulations can be pills, can be nasal sprays, and even injectables. And then for people with nausea, we have antiemetics — drugs specifically for nausea. Once again, many options there.

**Dr. Leroux** (02:09): And the most recent class for acute treatment, which is quite exciting, is the gepants. So, we have gepants that are CGRP blockers — a little bit like the antibodies — but in an oral form, in pill form. They're particularly interesting because they can be used to treat the attack, but also if you take them regularly for prevention. And then we can add on all of this, any self-care: essential oils, mint, [heat], cold, meditation, pet therapy, masks and earplugs, and things that can bring you some degree of relief to break an attack.

**Kellie Pokrifka** (02:45): Why do some acute medications have caffeine in them?

**Dr. Leroux** (02:49): Caffeine is an interesting substance. It has definite effects on the brain, and it will potentiate the effects of analgesics, for example. It's been shown that if you combine, for example, caffeine with acetaminophen, it will boost the analgesic effect of acetaminophen. And caffeine can help to break a migraine attack. This being said, we live in an era where there are coffee shops everywhere; most of us drink already too much caffeine. And in that sense, well, if you're drenched in the liters of coffee every day, using caffeine is probably not going to be super helpful, and on the reverse, you can actually get caffeine-withdrawal headaches. So caffeine is kind of a double-edged sword: Yes, it can help, but if you drink it all the time, it produces a bit of a medication- or caffeine-overuse headache, as well.

**Kellie Pokrifka** (03:44): Can you briefly touch on the essential oils you talked about?

**Dr. Leroux** (03:48): The world of essential oils is really interesting because, for some of those — for example, mint — we know exactly that they have a chemical effect on the sensory receptors. So essential oils can be a matter of smelling, but they can be also a matter of skin stimulation. And there's a very wide variation between people and individuals regarding the oils. Some people will not be close to any smell with a 10-foot pole during an attack, and others will really enjoy scents like eucalyptus, mint, lavender, citrus. Sometimes people will like the ginger, as well, for nausea. So, a wide variation. We know this from Migraine World [Summit]: No one-size-fits-all. But I've definitely seen the mint rollers that people apply to their temples seems to have some effectiveness. It was actually used in France in the 19th century. So this is nothing new there, but still can bring some relief.

**Kellie Pokrifka** (04:49): With the nausea medicines, are there any benefits for people who don't really feel like they have nausea if they happen to take those?

**Dr. Leroux** (04:57): So, in the oral form, not really. But when people happen to go to the emergency department, there is a lot of literature and scientific proof that drugs that we use otherwise for nausea that act on the dopamine system — dopamine blockers — when administered intravenously (IV) in infusion, can actually break a refractory migraine attack. But this is not clear how it's helpful, for example, if you take oral Gravol [Dramamine in the U.S. and U.K.] or even oral Metonia — metoclopramide, for example. It's unclear for suppositories because suppositories actually act on the venous system in the rectum. But I would say that if you don't have nausea and you're at home, I don't think that using a pill for nausea will help to break a migraine attack. This being said, once again, these pills can bring some degree of relaxation and even drowsiness, and sometimes that can help with the migraine attack.

**Kellie Pokrifka** (05:56): What about ditans and DHE [dihydroergotamine]?

**Dr. Leroux** (05:59): So, I did not mention ditans because we don't have them in Canada. So lasmiditan is a new molecule that arrived, I think, [in 2020] in the U.S. It is a bit of a cousin of the triptan. So it acts on the serotonin system, though the receptors that it targets is only the [1F] receptors. So, this is a bit of a kind of chemistry cookbook thing. I think it's marketed under the name Reyvow in the U.S. And it's said to be quite efficacious, though some people will feel drowsy and also have some degree of dizziness with it.

**Dr. Leroux** (06:29): DHE is dihydroergotamine. This is another remote cousin of the triptans. I would say it is not widely used for many reasons. It has some side effects. It comes in a nasal form that can irritate the nasal mucosa. It also comes in a subcutaneous form that people can use at home. Some of my patients use these, but usually those are not forms that are really good for regular use. It's also sometimes just not available — the vials are not available on the market. So, do I have patients using DHE nasal spray or subcutaneous? Absolutely. Is it a common thing to be prescribed? Not anymore. I think we have better options and more available options.

**Kellie Pokrifka** (07:17): What classes of medication are available for preventive use for migraine?

**Dr. Leroux** (07:22): Wow. So now I think we are at seven to nine classes, depending how you break them out. But I think if we just look at it from a very global perspective, there are what we call the first-line medications — so the old oral preventives. And those fall into three major categories. So, drugs for blood pressure — so beta blockers or ACE [angiotensin-converting

enzyme] inhibitors; drugs for epilepsy; and then drugs for depression or pain management — so tricyclics, for example, so the good old amitriptyline. There are other categories, but those are the three most common. And then after that, in 2011, arrived the toxin, Botox. So, this is a class kind of all in itself, and there's only Botox that is approved for chronic migraine prevention. So, this is an interesting way of preventing migraine and can be very well tolerated.

**Dr. Leroux** (08:16): And then there's been the big tornado of CGRP blockade. So, we have CGRP antibodies. There [are] now four of them. All of those are either injectable or intravenous. And then the last, but not the least, like I mentioned: The gepants. So, this is a CGRP blocker in an oral form that we can use to treat an attack or for prevention. So, this is kind of a bit of a scope. But then, if you look around, you can use DHE; for example, in France, they will use it for prevention. There are older drugs that are used: calcium channel blockers, gabapentinoids, even some people will use memantine. There's also the world of supplements, for example; there are many of them that have been studied. So I would say that the lesson to learn from this is two things: First, no one-size-fits-all; second, if someone tells you that there's nothing else to do, you better check that out. And yes, it can happen in the hands of a good headache specialist, but if you're told, like, "Oh, you tried everything," the list is now quite long.

**Kellie Pokrifka** (09:22): So, thank you for saying that. That means a lot. When you said supplements, could you discuss which ones are commonly used for migraine?

**Dr. Leroux** (09:29): Yes. So if I follow our dear Canadian guidelines, there are four of them that are approved, so it means the evidence is good: Magnesium, which is usually citrate or glycinate, 300 milligrams [mg] twice a day; vitamin B2; coenzyme Q10. And then there was something called butterbur, or Petadolex, [which] is now a brand name that has been approved. There had been some concerns on liver toxicity for this supplement that comes from this root. If it's not prepared properly, it can actually cause some liver issues, but now it has been restudied and rebranded as Petadolex, so now we're back [to] prescribing it.

**Dr. Leroux** (10:12): And then there are other things that people use, [with] a little bit less evidence but still there. Melatonin is one. Vitamin D — actually vitamin D is just great for everybody, and it can help for migraine prevention. And feverfew — or what we call *grande camomille* — is also a supplement that has shown some degree of effectiveness. Sometimes people talk about vitamin B12 — I'm not aware of evidence for vitamin B12. So not every vitamin is good for migraine. But I think I named, like, seven of them with some degree of effectiveness, so that's a good choice for people who'd like to try supplements. You can even combine them. Instead of buying tons of bottles of different pills, there are some preparations that combine different supplements in the same pill, so you have less pills to take.

**Kellie Pokrifka** (11:01): That's a great idea. With some of the preventive medications, you were saying how they were designed for other conditions. That can kind of be scary as a patient. Why are they doing that? Like, if they give me an antidepressant, are they saying I am depressed? If they give me an antiepileptic, are they saying I have epilepsy?

**Dr. Leroux** (11:20): So, it's very normal to think that way. You have to see it this way: That those drugs act on neurotransmitter systems in the brain, and they do act on part of the migraine cascade, right? Yes, they have been found by serendipity; they're not, kind of, designer drugs. But they will modulate the neurologic systems, and they can be actually quite efficacious for some patients. So, I'll give you the example of candesartan. Candesartan is a drug for blood pressure. It is actually a very good migraine preventive. If you look in recent literature, people

stay on candesartan very close to what they do with the CGRP antibody, and it's much cheaper. How does it act on migraine? Well, it's maybe not that clear, but then there is research on the impact of these ACE inhibitors on migraine.

**Dr. Leroux** (12:13): So, my message is, don't be afraid or scared; don't let yourself miss on an opportunity to try a drug. Now, if the drug doesn't work for you or if you have adverse events, just don't stick to it and go to the next step, because there are many steps and many options.

**Kellie Pokrifka** (12:29): Tell me about MRIs.

**Dr. Leroux** (12:31): The hard truth is: MRIs are [very rarely], if ever, useful for neck pain. And because — why is that? It's because what we see on an MRI does not correlate at all with the symptoms that you might have. So you could have a pristine MRI with terrible neck pain, or you can have a terrible MRI and not a lot of neck pain. This has been shown in numerous studies. So what is most important is actually a good physiotherapist, because whatever the neck pain is, it's very common that people will submit to passive approaches like osteopathy or chiropractic medicine, which can help. But doing exercises and working on your posture — strengthening muscles, not only stretching them — is key. And if a muscle is painful, very often it's because it's weak. So I've learned that instead of spending a thousand bucks on an MRI, maybe you should invest in a physiotherapist that will actually escort you and teach you exercises that you will use for spine health, and what I call neck maintenance, for the rest of your life, really. So this is kind of a long-term approach. It pays off, but you have to do these exercises that have to be fitted to your particular situation.

**Kellie Pokrifka** (13:52): Do you happen to have any advice on how to find one of the good therapists like [who] can actually understand what migraine is, how neck pain is interacting with it, how it can be both a symptom and how it can exacerbate attacks? Do you have any ideas? I feel like so many of us are sort of hopeless in this regard, because we've lost so much money and [have had] so many attempts at so many different types of practitioners.

**Dr. Leroux** (14:15): You can ask for specific credentials. For example, a physiotherapist will have training in manual therapy at a high degree. So, you can also ask about their experience treating headache. But be careful, because some people will always claim that they're very good with headache just because it makes [for] good business. So, look for specific training and credentials. And then, if a physiotherapist does not mention exercises at all in your situation, it should be discussed, right? Maybe it's not the right time for you. But if just — they give you a few little exercises like, "OK, put your chin in," and that's it — it should go beyond. It should go in[to] the neck, the shoulders, talk about the core. And there should be a follow-up on these exercises: Did they hurt? Were they feasible? And if not, well, how can we adapt them? Just don't let go and [say], "OK, go to do some passive manipulations," because passive manipulations can help, but they're very rarely a key to long-term. So those are a few tips that can help.

**Kellie Pokrifka** (15:18): So, I feel like a lot of us have tried different therapy options, and I would love to get your opinion on: How do we navigate that? How do we know if we've just had a bad therapist? If it's not for us, if we've had a good therapist? How do we do that?

**Dr. Leroux** (15:32): Support and talk therapy can be very helpful. Sometimes you need this neutral, supportive, ear and sometimes that's what you need. There are other types of therapies that have specific approaches that include the behavioral component — that means actual

goals, exercises. So, for example, ACT — or acceptance and commitment therapy — is a therapy that has shown to be very helpful in chronic pain. Now there's a lot of buzz about pain reprocessing therapy (PRT) that's been shown to work very well for low back pain — more than a lot of drugs that we use.

**Kellie Pokrifka** (16:08): And with that, do you have any tips on trying to navigate the system and find one that actually works? Would you say goals — making sure they are listing goals — would be one of them?

**Dr. Leroux** (16:17): Well, I would say that you have to have some degree of understanding of what you are looking for with the therapy. Is it that you're just desperate and you need someone to talk to, and to listen, and to support? Or do you want to work on your thoughts? Do you want to understand your thought process? Do you want to identify certain behaviors and thoughts and change them? And this is what comes with ACT, PRT, sleep CBT [cognitive behavioral therapy for insomnia], as well. So many people with migraine have insomnia, and they say, "Oh, I tried all those drugs, and nothing works." And sleep CBT can be highly effective there. There's tons of evidence. The problem with sleep CBT is that sometimes there are phases of it that are really difficult, and if you just try to use an app, for example, it's not enough. So look for those terms, understand what's behind [them], get a book sometimes just to understand what's what, and then make sure that you feel at ease with the person who's in front of you and that you feel some degree of understanding and good communication.

**Kellie Pokrifka** (17:24): And what are your thoughts on how past trauma can relate to our current health issues?

**Dr. Leroux** (17:30): So, past trauma: It can be in childhood; it can be abuse at a later stage of life. And now research is showing that trauma, especially during childhood, is a significant component of future health. Now, it's not necessarily something that is unavoidable, and it doesn't mean that because you had a difficult childhood, then there's doom and gloom and nothing's going to go good for you. It's not true. We know some people fare to that, and people manage in very different ways. But what we know is that this can have a significant impact and lead to all kinds of different symptoms; that if the trauma is not addressed, they can actually persist. I want to be very sensitive with this topic because trauma is extremely sensitive. This is something that usually has been extremely hurtful, and just to tell you that, it's not that clear what to do with this — even in 2023.

**Dr. Leroux** (18:28): So, there's a very good book that's called *The Body Keeps the Score* that illustrates a little bit of the mechanism of the trauma in the first part. The second part is more about ideas for treatment. But just to let you know one thing: Even headache specialists, pain specialists — I think in pain clinics they usually ask about this — but a lot of people who see headache, we are not trained as neurologists to manage trauma and PTSD [post-traumatic stress disorder]. We're not sure what to do with it. We don't want to harm anybody. So, for many of us, we're not even sure how to ask. Should we ask? And this is still a bit of a controversy in our community. But my point is: If you feel like your provider is not listening to this or if you'd like to share this with your provider, really go ahead. Because sometimes trauma [may] have an impact on symptoms and pain. This has been well shown, and I think there's more and more things that can be done to help people, but with some degree of difficulty. And I want to send my compassion out there to anybody who's been a victim of abuse, trauma, aggression. You did not deserve this, and you deserve help.

**Kellie Pokrifka** (19:42): What have you learned about contraception methods in your clinic?

**Dr. Leroux** (19:46): The hard truth is, it's very difficult to predict what hormones — or what contraception methods — how they will impact your migraine situation. But my message to the community is [that] if you are planning for anything hormonal — any intervention, any new pill, any device — just think about it; maybe discuss it with your headache specialist or treating physician, and monitor in your diary what's going on because it could impact. And a little tip also that I've learned is [that] some women have been on the pill for quite a bit, and then when they stop it, it seems to improve migraine for them at this phase in their life.

**Kellie Pokrifka** (20:30): So traditionally, there's been a pretty hard barrier between episodic [and] chronic migraine. Do you see that reality in your practice?

**Dr. Leroux** (20:40): Well, I have a very strong position on that — and it's actually supported by literature and science — that this limit at 15 days per month is completely arbitrary. But where to draw the bar is not that clear. One thing that's getting clearer is that the impact of migraine gets more severe, way below 15 headache days per month. Actually, we believe that if you have, let's say, four to six days of migraine per month, especially if they're well treated, the impact can be tolerable, you can manage it. But the minute that you go over eight or 10, that's probably what we call the transition zone, where the impact becomes more significant. And so, some people are actually arguing that chronic migraine should be put at this line. But whatever line we put, there's always going to be this flowy continuum.

**Dr. Leroux** (21:35): So my recommendation is: You have a diary, and then you look at slices of three months, and then you just look at your severity, your frequency — and you have this kind of bracket. Are you a four-to-six per month person? A 25-30 per month person? Do you have a continuous headache, plus attacks? Or, if you would, eight to 10? It's just a quantification. We do it for everything in medicine. So, I think now is the time for a bit more precision in migraine evaluation. If you think about it, in another field of neurology — epilepsy — our goal for epilepsy is to be seizure free. And if someone has one seizure or two seizures per year, it's a big thing. So, I think the burden of migraine is unfolding, but we still have to remember that three-quarters of people with migraine are in the low-frequency episodic spectrum and will probably remain like that.

**Kellie Pokrifka** (22:33): All right. What has been your experience with medication overuse headache or medication adaptation headache?

**Dr. Leroux** (22:39): So, regarding the famous medication overuse headache: Over the course of my practice, there's been a scientific shift on how we perceive and how we treat this condition. So, medication overuse headache, just to recall, is when someone uses different acute treatments — so analgesics, Tylenol, triptans — on a relatively frequent basis, and then this actually prompts a bad reaction in the brain that makes them even more prone to migraine attacks and can lead to what we call chronification. Some doctors were actually just saying — poor patients — "Well, withdraw, stop this. And when it's done, then you can come back and see me." I've heard those stories.

**Dr. Leroux** (23:24): So now we have a bit of a better understanding. So first, once again, there are different situations. For some people, it's true that the medications they're taking are causing a real issue, and the withdrawal will help. But there are people where it's not the leading factor, and then the key is to optimize prevention. And if you find effective prevention,

then the intake of acute medication will just drop because people won't use them anymore. So, there are subgroups. It's very difficult for us doctor[s] to predict who is going to be in which category. So sometimes we have to be very careful in choosing the right strategy for an individual. Now, when I teach to residents about this and to my colleagues, I try to be more flexible in my approach: To make sure to optimize prevention, to make sure to inform my patient with no blame. A lot of us actually think that the word "overuse" in itself — I call it frequent use — because why is it "over"?

**Kellie Pokrifka** (24:30): All right, so tell me what you have learned with adult-onset hemiplegic migraine.

**Dr. Leroux** (24:35): All right. This is a sensitive topic, and I want to bring it forward in case it can help someone. So, I'm really talking to help — not to discredit, disregard, or induce confusion. Here's the thing: Hemiplegic migraine exists. This is a genetic disorder. We have genes that are described for this, and these people will have auras where they mostly paralyze on one side of their body. It is a complex disorder, and it does exist.

**Dr. Leroux** (25:05): Now this being said, it is known to the neurology community that something exists in neurology called a functional neurological disorder (FND). So those are disorders that can be virtually any symptom. So, it can be tremor; it can be paralysis; it can be seizures; it can be even losing sight, for example. But they are not caused by a lesion — so, a brain tumor or an infection that we can see. FND is an evolving part of neurology. So, the key here is that FND is not going to respond to migraine preventives, or to drugs, or so on. It can respond to different types of therapies, but this is an evolving area. So if you suffer from hemiplegic migraine but you've never seen a headache specialist — or if you've seen one, the diagnosis is unclear, you have very frequent attacks, it's a little bit fuzzy — well, maybe you should go on the website neurosymptoms.org and have a look at what FND is — just for curiosity — and could this apply to your situation, and could it lead to some degree of improvement? Because I have treated patients with FND, and they improved only after we addressed the FND component.

**Kellie Pokrifka** (26:29): OK. What are your views on exercise and how that correlates with migraine?

**Dr. Leroux** (26:35): I'm a big, big fan of exercise, and I have to share that as a kid, I was, like, a library rat, OK? I was just this pudgy kid who was just there, never moving, because I'm very clumsy and I was not an athlete myself. And as a physician now, I have learned a lot about exercise through my own investigations but also through what my patients say. And a lot of people can actually benefit from help. So, for example, with kinesiologists, personal trainers. People invest a lot in osteopathic treatment, chiropractic treatments, but they don't think about learning how to move their own body for their own knowledge for the future. So I do recommend, more and more, personal trainers or kinesiologists because they can motivate you. A lot of them are actually trained in chronic pain, and they understand mental health issues if you have those issues. So, for three months, you just commit to this and you try to find how you can move better — whatever it is. So, flexibility, persistence, and just trying different things can make a huge difference on your body, health, mental health. And I say this because my own mental health depends on exercise. And I see my patients when they find their thing — and it takes time — then I just see the results, and it's amazing.

**Kellie Pokrifka** (27:57): Have you learned anything from your patients in the clinic who are struggling so hard? You know, it's one of those days where the idea of blinking hurts so much,

we're in so much pain — let alone going to exercise. Have you learned anything from your patients on how can we do that when we're so disabled?

**Dr. Leroux** (28:20): So, the idea of having a resting place, if possible, in a recliner — but not in your bed, not in your room — and maybe have a gentle like, yin yoga or stretching routine or restful pauses, supported. That's for those super tough days.

**Kellie Pokrifka** (28:39): So I would say, basically, the crux of everything you have taught us today is, everyone with migraine is so individual. There's not a one-size-fits-all. There's not a therapist, there's not a healthcare professional, there's not a treatment that will work for every single person. And it is so exciting to hear a headache specialist who is so empathetic and cares so deeply about trying to make sure that each person gets that, and they get help. Do you have any closing thoughts that you would like to share?

**Dr. Leroux** (29:09): Well, I can say after 15 years of this practice, I'm learning every day from my patients. And I've learned patience, persistence, courage. And I've seen a lot of great stories. So, don't lose hope out there, because I know sometimes it seems like it's hopeless, but there are all those possible things — all those potential allies that you can find to help you on your way to relief. So keep trying, and as Winston Churchill used to say, "If you're going through hell, keep walking."

**Kellie Pokrifka** (29:49): Dr. Leroux, is there anywhere we can follow your work or learn more about what you're doing?

**Dr. Leroux** (29:53): If you're a Canadian, please follow Migraine Canada. If you're a Francophone Québécois like me, you can follow Migraine Québec. But look up the association that is in your community, because they are more likely to know the real reality of your healthcare system, what's available to you, and so on. Another thing that I take very much to heart is the Canadian Migraine Tracker. So, we have an app — there are many apps out there; once again, everybody finds their favorite — but if you haven't tried a tracker, it's very simple, it's very concrete, and you can send reports to your physician. So, we're working on this. It's in French, English; it's free. So, you can consider trying this Canadian Migraine Tracker app.

**Kellie Pokrifka** (30:37): And can we use that if we're not in Canada?

**Dr. Leroux** (30:39): Oh, absolutely. We have users all over the world.

**Kellie Pokrifka** (30:43): Dr. Leroux, this made me so emotional. This is so validating, and I'm so excited to have you here. Thank you so much for being on the Migraine World Summit.

**Dr. Leroux** (30:52): It's my pleasure.