



Progress Your Health Podcast - Episode 094

What Is LDN Used For?

Dr. Maki: Hello, everyone. Thank you for joining us for another episode of the Progress Your Health Podcast. I am Dr. Maki

Dr. Davidson: And I am Dr. Davidson.

Dr. Maki: So today, we are going to do not really an actual question like we have been doing on some of the past episodes. But today, we are going to actually something that does come up quite often. So it is kind of a question. It is not coming from one person. But today we are going to talk about low dose Naltrexone or LDN.

Dr. Davidson: Exactly. So LDN, low dose Naltrexone. We have actually used with our patients for a number of years, but we do get a lot of listeners, just people that run across our website, people from thyroid groups looking for low dose Naltrexone, because while it has been around for... Gosh. Naltrexone has been around like...

Dr. Maki: Thirty years. Yeah, late 70s or early 80s.

Dr. Davidson: Yeah, the 80s, you know, doing low dose Naltrexone has not been as, you know, as common wise. Maybe for about the last ten like we have been using it probably for about the last eight to ten years, but it is not very much wide-known. I guess you could say, conventionally, so people will go to their conventional doctor looking into it and then, you know, they then their doctor looks at him like you want to go on Naltrexone.

Dr. Maki: Yeah, right. Yeah. It was originally developed for as the HIV and AIDS epidemic was starting to kind of show up in the early 80s. It was used as a medication to curb alcohol and drug addiction because it has certain effects on the brain. It is supposed to limit your cravings for those types of things, those kind of dangerous behaviors that becomes a little bit too habitual and you have an addiction. But actually, along that path over the early 80s, a doctor in New York - I think his name is Dr. Bukhari

- noticed that his, and I am not even really sure how he discovered or how we figured out the low dose part, but notice that some of his patients were actually improved. Their immune system status was improving with HIV. Now, we do not necessarily hear as much about HIV or Aids anymore. It is still around but not nearly as stigmatizing as it was in the early 80s. In some ways, if you think back, even up until the 2000s, you know through the 80s and 90s, you know, HIV and AIDS was kind of, you know, everyone was very fearful of that kind of like they are now at the Coronavirus. A little bit similarities there as how fearful everybody was because we just did not know anything about it.

But low dose Naltrexone, so using it for what it was intended for, FDA approval, that was in doses of let us say 50 to 300 milligrams. What we are talking about low dose Naltrexone if you look it up online and there is some couple of really good websites that have some information about it. It is using doses of let us say 1.5 to 4.5 milligrams. Even I have seen some anecdotal and some research using it up to 10 milligrams and that probably would be based on a few factors. Maybe age, size of the person, you know, a male, a 250-pound male is going to take more than, you know, a 125-pound female and, you know, different things like that. So when we say low dose, that is really not how it was intended to be used, but we will get into kind of how it works here in a second. But like I said, we have been using it for a decade and, you know, we have seen some really good success stories with using with patients.

Dr. Davidson: Like you said Naltrexone itself, I mean is still used in rehab centers for alcohol and opiate addiction. In fact, they have Naltrexone implants because if you were to do your, you know, if you are taking a you know, a conventional level of Naltrexone, which could be anywhere like 75 milligrams twice a day, a 100 milligrams twice a day, 50 milligrams twice a day or having an implant, if you were to do your opiates, you know, take an opiate on top of that you would get really, really sick. You would not die, but you would get really, really sick. So that was kind of the premise with Naltrexone. As you take the Naltrexone and then it reduces your cravings and which when with addiction I do not know how you can reduce cravings, but at least if you did take that offending, you know, addictive chemical substance or opiate, you would get really sick.

Of course, then people would take their Naltrexone and then they would take their, you know, their substance of you know that they were addicted to but that is why the implants are there so they still use it. So when we are using low dose Naltrexone with patients, we are using it for a completely different aspect, but sometimes those get a little entwined. Like I had a patient, you know, I had to run some low dose Naltrexone, and then she happened to google Naltrexone and was like, "What? What is this? This does not make sense." Or she showed it to her doctor and her doctor said, "Why are

you taking this?" They do not realize there is a huge difference between 1.5 milligrams or even up to six. I use 6 milligrams with quite a few of my patients versus 75 milligrams twice a day or 300 milligrams, you know, throughout an entire twenty-four-hour period.

Dr. Maki: Yeah, right. The effect that it has on the body is completely different. Now, LDN or Naltrexone... Let us say Naltrexone. Let us not say the LDN, but Naltrexone itself is what they call a opioid antagonists, are an opioid receptor antagonist, meaning that it basically blocks the opioid receptors in our brains. So if you take an opioid medication, like Percocet, oxycodone, morphine, anything like that, they compete for the same receptors and that is what makes people ill if they combine the two and, you know, something simple. Someone is on LDN because we will get into what it is used for here in a little bit, you know, autoimmune problem or something to go into the dentist or they have some kind of an acute issue. Now, granted we always coach everybody and usually pharmacies that we work with are usually pretty good about catching that stuff. But if they have an acute issue in their given pain medication and they do not realize that you are not supposed to take the LDN with it, they find out, you know... I mean it is not going to kill you necessarily but you get really nauseated and you do not feel very good for a few days.

Dr. Davidson: And it really does, like you said, we work with patients. We talk to them. We coach them, the pharmacies, too. I have only had that happen twice using the low dose Naltrexone with patients. Twice. Once, a patient did not tell me. She said she was not on opiates, but apparently, she was taking some and probably should not have been so there was, you know, an issue that happened there and so and then there was another patient who had an elective surgery and had talked to the doctor about post-surgery. I do not want any, you know, any medications, any opiate medications, any pain medications. It was something very, very minor. I think it was like a little tiny lipo or something but the nurse did not read her chart and then and she loves the LDN so she had been wanted to continue taking it because I have a lot of patients that have elective surgeries and we just stopped it before the surgery and then if they have to take a pain medication then we restart it when they are done with their pain medication.

But this patient, in particular, she loves the LDN. She did not want to stop it and she has a high threshold for pain anyway, so but the nurse did not read the chart, gave her some pain meds, right when she came out of anesthesia, and she was very sick and it was kind of a weird debacle, but it all ended up fine. So, I have only seen it twice. It does not happen that often. That is why you have to have that communication with the patient, and usually patients that want low dose Naltrexone know what it is for. They have been looking for and they come and find us or we are working with the patient because most of our patients are very well-educated. They are doing their own

research. They know what is going on in their bodies. So we are just kind of help guiding them. So we really do not run into any issues like that.

Dr. Maki: Yeah, right. I actually was talking with the patient just the other day. We did some testing. We did... She is having some hand pain or, you know, just some generalized joint pain. She had been having it for years. I decided to run, which I am surprised that either did not run it before or one of her other doctors did not run it before, but she came back with a positive anti-nuclear antibody test. You know, so positive for some type of autoimmune disease or at least the autoimmune potential. That is what... That is really the main thing that LDN has gained some momentum for is all of the autoimmune problems that people are dealing with, everything from Hashimoto's to lupus to rheumatoid arthritis to Ankylosing Spondylitis, MS. The list goes on and on and on.

And actually, in preparation for this episode, I was doing a bit of research and I wanted to be a little more clear on the medication contraindicated list and she just happened to mention that she is using Tramadol for pain and I did not realize at the time when her and I were speaking about it that Tramadol actually is contraindicated with the LDN. So I had to, you know, kind of warned her a little bit preemptively before she started it. Says, "You know what? We have to kind of decide here." Personally, this is where LDN, I am not a big fan of any of those pain medications, right? I mean those pain medications I think are overused all the time. We know that it is kind of a crisis around the country. People are abusing opioids and I think for chronic pain management, LDN, that is one of the things that you can use instead and I think it has a much better... When a doctor or practitioner is evaluating a medication, you always have this cost-benefit ratio to any treatment, whether it is a supplement, whether it is a vitamin, whether it is a narcotic or a medication of any sort, you are kind of evaluating. "Is this medication worth it for this particular type of situation?" I think that is why LDN has become so popular because it has a really good upside, mean it has lots of benefit but the side effect part portion of it, it iss relatively as long as you avoid these couple of things we are talking about, you know, the side effects of LDN is actually pretty low.

Dr. Davidson: Exactly, and like you would kind of mentioned is for low dose Naltrexone really what we started using it for was for autoimmune disease. There is not a lot of great treatments out there for different autoimmune diseases and a lot of the treatments really are not great prolonged. Like a lot of times with autoimmune like and rheumatoid arthritis, connective tissue disease, you know, autoimmune tissue disease, a lot of times it is steroids. You know, they are taking steroids for years. That is really not a great idea to be taking it for years. So a lot of times, and specially also with MS, a lot of those treatments are, you know, can be pretty invasive. They do have, like you said, weighing

those pros and cons on how that is going to work. So the low dose Naltrexone is a really good alternative to be able to work with somebody with some type of autoimmune disease, be able to reduce down that inflammatory component so that you reduce down eventual degeneration.

In fact, with rheumatoid arthritis, it is probably what I find that it works really, really good with and I do find regardless of, you know, males or females at the 6 milligrams and I am generalizing here. But this is just in my own experience that the 6 milligrams is really a good dose for that low dose Naltrexone for rheumatoid arthritis. But for the most part, you know, with training or a lot of, you know, practitioners out there that are training with low dose Naltrexone, the original dose was 4.5, which is what they used, and then they found that even going lower works a lot well in Hashimoto's and other autoimmune conditions. So of course, like I said, you have been going up to 6 milligrams is nothing like actual Naltrexone 75 milligrams twice a day. That is a completely different use for that medication because lots of medications have different uses, you know, depending. But definitely, you know, the low dose Naltrexone is amazing for autoimmune conditions.

Dr. Maki: Yeah, right. Yeah and the list and I was like I said, I was doing a lot of preparation and the list of potential conditions, everything from endocrine problems, you know, hormone problems to female problems to rheumatological issues to chronic pain to, you know, skin issues. I mean, there is just dozens and dozens and dozens of potential uses. And again when it has that really positive, you know, cost-benefit ratio, it makes it a... We used it enough to know that it is not a Panacea. You know, sometimes it, you know, does not have the impact that you wanted to have, you know, so it is not going to solve everybody's problems. But and I would think of it when you use it, let us say with one of your rheumatoid arthritis patients, what is the time frame that you notice where once you implement, you know, then that titration - we will talk about the titration here in a second - that you notice that the patient starts noticing some improvement.

Dr. Davidson: It seems like three weeks is that magic mark. Once, and because it does take a little while to get into your system and, you know, it is not like taking an Advil and your, you know, your pain goes away and kind of comes back. It does. It takes a while to build up into the system that I do find that three weeks. So I do tell people, "You know what? Keep taking it every day until we hit three weeks." Because we will go into a little bit... There are a couple of little bit of side effects, but usually three weeks and beyond and, like you talked about, titrating it because there are some side effects mainly, you know with the gastrointestinal issues like a little nausea in the beginning as you might start a little low and then work your way up.

Dr. Maki: Yeah, right. Yeah. You see, very commonly like a starting point will be 1.5 milligrams then you double it, you go to 3 and then you add another one in there you go from 1.5 to 3 milligrams to 4.5. Unlike you mentioned, you could raise it one more time and go up to six. You and I have never used more than six. You know have you used more than six?

Dr. Davidson: I think I have one patient that were up close to 10 or no, I think maybe a little less than a handful of patients there. So but I do not usually... Usually 4.5 is the most common dose, but you know, you know yourself just like, you know, we talked at length with our patients is I know if someone is ultra-sensitive, we might even start at 0.25 milligrams of low dose Naltrexone or 0.5 and then work our way up. And then some people I know, "Hey, you know what? This person really is not that sensitive." They are pretty hardy. They need some, you know, their system could probably tolerate something stronger is "Hey, let us jump up and start at 2.5 or even at, you know, even at 4 and you know, you know who you are if you are sensitive and we just kind of work around that and then take the time to raise up and increase up that dose. On a side note, that is why when people are taking Naltrexone for a completely different, you know, drug addiction and opiate addiction is they take it twice a day and that is because Naltrexone really only has about like a ten-hour, twelve-hour lifespan. So when you are doing low dose Naltrexone treatment with somebody for anti-inflammatory or for autoimmune conditions because, you know, it only has that twelve-hour lifespan, we only have people take it once a day. So you take it at night because while your, and you take it with food because like I said in the beginning, usually takes about a week for the stomach to get used to that nausea. You take it at night and then by the time you wake up in the morning, then it is out of your system because the premise behind reducing that inflammation and working on that auto immune component is that is only taking it only having it in your body for twelve hours.

Dr. Maki: Yeah, right. And the mechanism that you are, what you are trying to accomplish there, like you said with the the higher dose Naltrexone, you are trying to keep a steady supply to blunt craving. So you are having this very specific brain effect to curb alcohol and drug cravings. With the low dose Naltrexone, you take it at night. One thing that does happen for some people is you are you are trying to stimulate an increase to what they call opioid growth factor. Opioid growth factor is basically like an internal endorphin that our body creates, almost like its own internal, you know, pain medication so to speak, stimulates the same receptors as the morphines, the Percocet oxycodone, but your body produces that so when you take it at night that you are suppressing the release, you are suppressing the release of that opioid growth factor. So that kind of interaction there can cause some insomnia when people still take in the

beginning that can really and it can create some really crazy dreams. You know, so but again, that is also why you start a little bit of a lower dose. Sorry. There is a little banging down at my feet. Our co-host, Bob, is chewing on a beef cheek and he is banging into the desk a little bit. So hopefully it is not and this happens all the time.

Dr. Davidson: He looks really cute though.

Dr. Maki: Yeah. Yeah. Yeah. If you have listened to some of our other podcasts, we talked about Bob all the time. We have a little rug in here in our little podcast studio and he is literally like right at my feet chewing on this big long, about a foot and a half, footlong, beef cheek and it is been going up against the metal desk. It is adorable. I mean, it is really adorable, but hopefully you can not hear that too much on the audio. So I kind of lost where I was there.

Dr. Davidson: You were talking about the opioid growth factor and how when you take it at night, it blocks the receptors. So it basically blocks the opioid growth factor, but then the next morning when it is out of your system, you have this huge surge of opioid growth factor.

Dr. Maki: Yeah, right and that is, that is the stimulation to the immune system that eventually, you know, from a, you know, an autoimmune perspective, we do not really want to stimulate the immune system necessarily because that could potentially exacerbate an autoimmune condition. This is just improving the immune system. So now, the proper anti-inflammatory processes kind of, you know, eventually and we are still even learning. Like we are learning on how all of those things happen and how the LDN actually works. We know that it affects the opioid growth factor, but, you know, even reducing inflammation in general, like like say for example another use of LDN can use it in weight loss or obesity and it actually able to improve because of that anti-inflammatory effect. It can improve improve insulin resistance, which is kind of an underlying component of obesity, diabetes, heart disease, you know, fatty liver disease. I was talking to a patient of the day about fatty liver and LDN. We kind of had a similar conversation there. You know, so there is a lot of potential. The point of this podcast is just if you are not familiar with LDN, just to know that this is a and the good part about it is, too, that it comes from a compounding pharmacy. Like you said, we can custom tailor that dose. If you are a little bit sensitive, maybe you had some nausea at 1.5, you could go down to any a milligram amount and then titrate slowly if you had to, so you can minimize some of that GI problems or whether you are having some, you know, insomnia or some dream issues. You can... You do not have to stick to those three doses. There is potentially unlimited number of doses and then, you know, the

practitioner can titrate that as slowly or as quickly as necessary for whatever the situation might be.

Dr. Davidson: And like you said, I mean, it is not a Panacea. Nothing. Nothing is a Panacea or the one pill, fix all in life. But so I do find that some people, it works amazing for. It reduces down their joint inflammation. You can reduce down Hashimoto's antibodies for Hashimoto's disease and then other people, sometimes, it does not do anything. I have never had somebody have a negative reaction to it. Other than maybe in the beginning, they might be like, "Oh, I got a little nausea," but that is fine or like you said a little insomnia and usually that will I will say started on Friday. So if you get insomnia, you only have it over the weekend because it does not last that long, but there is not really any so much negative side effects, but you know, I do have lots of patients that we worked, you know, I worked with. We have done it and, you know, they did not really have an effect we are looking for and then I have a lot of patients that do. Like I said, we are all unique so it would be something. I do think there is just so much potential with the autoimmune world or autoimmune disease world because the conventional medications really, you know, really have a lot of cons. I mean sure there is some pros. I mean autoimmune disease, you have got to do something about that. But at the same time, you know, some of those medications are really harsh.

Dr. Maki: Yeah, yeah. Almost every one of them, almost every single one of them has some type of side effect that is going to be, you are going to have to consider as a possibility at some point. It is not a matter with a lot of them. It is not a matter of if it is a matter of when and the more severe that is where they just kind of keep ratcheting up the treatment. So then you are just that much more likely for having some kind of a crazy side effect because the dosing has to go up or the number of medications has to go up. You know, so when it comes to that, like I say, that rumor that rheumatological autoimmune world, tons of potential. And again, we are just still realizing that it can be used from, you know, so many different things that people are looking for a safe effective and affordable. That is the other thing when you get it from a compounding pharmacy, it is relatively a really cheap medication. Comparatively that is in some ways, makes it a very good option. So even for people out there that you know, maybe excuse me, that are not used to LDN or not familiar with LDN. I am sure a lot of our listeners are. Because like you said earlier, our listeners are pretty savvy. People have heard about it, but it is just a little bit challenging to, you know, conventionally, doctors are not going to prescribe it. They do not even know what it is, you know, but like you say, the last, you know five years or so in the last couple of years has really gained a lot of momentum and we hear about it, you know from colleagues and peers in trainings that we go to for continuing education.

There is always something about LDN to some extent. Always. Even cancer, right? You know, I have a few patients with cancer that we have used LDN before. Leukemia, Lymphoma, you know, blood cancers, solid tumors. There is some good research for, you know, quite a few different things. So yeah, I think the weight loss, the obesity one, I think that is there is actually a commercial medication that uses the Naltrexone side, a little bit of a higher dosage, you know. But we think that even using the low dose actually from that anti-inflammatory response because we do not really, even from a weight-loss perspective, we do not really necessarily want to curb appetite or suppress or, you know, create choloric restriction. We do not want to turn anybody's appetite off and that is not how you solve that problem but by reducing inflammation and and improving insulin sensitivity, that is how you know, that is how you can have some long-term progress and have an effect on changing somebody set point. You lose 20 pounds, but your body says, "No, we want to be where it was," and you gained 20, gained back 30, you know, that is that magic set point that our hypothalamus in our brain gets a little bit distorted. We will talk more about that later. Using things like LDN, you know, can be helpful in improving somebody's set point.

Dr. Davidson: And just, again, on another side note, what you are saying there, you think about those "Oh, so will you take the low dose Naltrexone? You only take it once a day. So you take it at night. It blocks those opiate receptors. And then in the morning, you have this surge or the opioid growth factor," and like you mentioned, hey, you know opiates are like our natural, you know, helps reduce pain. It helps us feel good. I do not know if there is any research out there, but with some of the patients that I have worked with, when they take the low dose Naltrexone, maybe we are working on autoimmune component. But because that opioid surge in the morning, it helps their mood and you think if you are feeling better, then you do not go for the comfort food. So I have found that patients say, "Hey, it is not that the food does not taste good to me. Sure ,ice cream and a brownie sound great, but it does not... I do not want to eat it. You know, I am not craving it. It is not that my taste buds do not want it. It is just I am not feeling the need for it." So I do think that there as a little bit of aspect for there. I do not know if there is any research or if anybody else knows anything about that, but I have found that that people do not gravitate towards those carbs in the mood food like they did before the LDN.

Dr. Maki: Yeah, right. Yeah, they definitely think there is the potential there to kind of investigate that further where there is almost like a dual benefit. You are having the anti-inflammatory effect by surging that opioid growth factor, suppressing it and then it rebound. Suppressing it and then it rebounds. Normally, with drug treatment across the board, if you are trying to suppress something, most medications out there block

receptors or enzyme. When you do that on a long-term basis, that is usually where the side effects come from and that is almost how all medications work. They block either receptors or enzymes. In this case, we are blocking the release of this growth factor. We are suppressing it, but we are allowing it to surge and come back. That is, you know, kind of, in some ways, using a very, you know, intelligent, a very intelligent use for a medication that creates a response in the body where the body does, you know, does all the heavy lifting on the back end. That is very attractive and I was looking back at some research.

There is research on all tracts and goes all the way back to the 80s on some of these ideas. So this is not necessarily new stuff. There is lots of information on PubMed, both, you know, twenty, twenty-five, thirty years old and also newer stuff. I think that trend is going to continue. People are going to keep looking into it. So the, you know, as you know, medicine, of course, is a practice. It is an art and a science at the same time and you and I are always... That is maybe ironically how we got into what we are doing, but we are always trying to push that envelope to try to figure out how to best serve our patients. What other potential things are there out there. Dr. Bastyr even says, "Use what works." But also making sure... Dr. Bastyr was, you know, we went to Bastyr University in Seattle. He is a kind of the name, the person that the school is named after. I am sure some of you might know that but a lot of you probably do not. And he always said, "It does not matter what it is. As long as it works and really, you know, from a Hippocratic Oath perspective, as long as you do no harm." I think the LDN fits that bill pretty well.

Dr. Davidson: I agree.

Dr. Maki: So I think this is a good little... Maybe next time, we will talk a little bit more about mechanism and kind of how it works. So we will just kind of give a little overview just to kind of introduce people to it if you are not familiar with it. This is more validation for people that are familiar with it, and I think we will leave it at that. Do you have anything else to add for this episode or should we call this one...

Dr. Davidson: No, this is great.

Dr. Maki: Yeah, yeah. I think this is good. So until next time, I am Dr. Maki.

Dr. Davidson: I am Dr. Davidson.

Dr. Maki: Take care. Bye-bye.

