Katie Johnson: Good morning and welcome to Apple a Day, Lake Region Healthcare's health and wellness show, where we feature news and information you can use to live a healthier life. I am Katie Johnson, your host, and my guest today is Dr. Lorant Divald. He is a general surgeon who offers services primarily at our Morris and Elbow Lake locations of Prairie Ridge Healthcare. And he has a special interest in minimally invasive solutions for GERD, reflux, and heartburn. Something that I know a lot of listeners struggle with. So he is joining us today to offer some insights to those who suffer from chronic GERD and give us some tips and information we can use. So good morning, Dr. Divald, and thank you for joining me.

Dr. Lorant Diva...: Good morning, Katie. And hello everybody. Thank you for having me.

Katie Johnson: Yes. Thanks so much for taking some time to talk about this important and popular topic. I want to start first though, to just let our listeners get to know you a little bit better. Tell us about yourself. What is your background, maybe your education and experience, and how long you've been part of the team at Prairie Ridge?

Dr. Lorant Diva...: Sure. So I'm a general surgeon. I come originally from Czechoslovakia, but I have been living in the United States for about 20 years now. I did my medical school offshore in the Caribbean and then went to do my general surgery training in Albuquerque at the university hospital there. And then from there, I went to a fellowship at the Mayo Clinic and that's how I got to Minnesota. And I stayed afterwards in the region. I have been a practicing surgeon in Minnesota since 2016 and with the Prairie Ridge Hospital for last two years, and the last year, full-time.

Katie Johnson: What led you to have an interest particularly in GERD? And maybe we need to spell out what GERD stands for, which I'll let you do because I have trouble pronouncing it.

Dr. Lorant Diva...: Sure, sure. So GERD is gastroesophageal reflux disease. It's pretty much what people think of a heartburn, even though it's a much more broader disease than just heartburn. But when people say I have GERD, they mostly refer to having heartburn. They might not even know they have the other symptoms that comes with it.

So my interest in GERD grew since I started my surgical training in Albuquerque. I had a mentor of mine that was a minimally invasive surgeon, which I'm very interested in minimally invasive surgery overall, like laparoscopic and minimally invasive hernias and intraabdominal operations, but GERD is part of it. So I started doing those operations with them and they had a big reflux program in Albuquerque and I always enjoyed it. It's a very complex disease of the stomach and the esophagus and the junction between those two. It's not very well understood and we are getting much better at understanding the disease. So it

stimulates me, and most importantly, with the newest technologies we help the patients tremendously so we can get them off of the medications.

Katie Johnson: Yeah, that is really good news. Let's talk a little bit more about the condition itself, maybe what causes it and how common of a problem is it. How many people are affected?

Dr. Lorant Diva...: It's extremely common. It's estimated anywhere between one in four to one in five patients in the United States will be taking a daily antiacid medications, which of the stronger kind, the proton pump inhibitors. And then many more patients will be taking Tums and over-the-counter medications that nobody prescribes to them. So it's extremely common.

And what it is, it's pretty much a damage or insufficiency of the junction between the esophagus and stomach where almost always the diaphragm stretches and causes a slippage of the stomach through the diaphragm, up into the chest, which is called a hiatal hernia. And this will disrupt the natural processes that prevent acid and stomach contents going up into the esophagus and stay in the stomach. So I am a firm believer that behind reflux disease, almost always there's a hiatal hernia, which is the hernia of the diaphragm contributing to the disease of the reflux.

Katie Johnson: So I guess if that's the case, it sounds like medical interventions are probably usually necessary. You mentioned Tums and over-the-counter things, are there things that patients should try before they seek medical attention or treatment? Or what are the signs maybe that your reflux or your heartburn is chronic, that maybe there is a hiatal hernia behind it and you should seek medical help?

Dr. Lorant Diva...: Yeah, sure. So not everybody with reflux will have chronic reflux. So reflux can come and go. And sometimes patients just need to take Tums or maybe over-the-counter Nexium for a week or two. And then they are good for next three months without any reflux, and it just comes and goes in a circular fashion.

But when it becomes a problem of a daily living, when you have to take the medications for reflux every day and you cannot take a break of them, then that's something that you should seek medical attention for and the medications. Even before we start prescribing medications, we recommend patients to do lifestyle modifications, which would be losing weight, not eating before going to sleep, give your stomach about two hours to empty, and maybe put some pillows underneath your head and chest so you sleep elevated, so you don't reflux at night. And then avoid foods that cause reflux. The most frequent offenders would be wine, chocolate, spicy meals.

And if those don't help, then usually people seek help. And they have learned by trial and error before they see the doctor, they know what to avoid and what makes them feel better. But the typical reflux, typical chronic GERD will be there for weeks to months and just doesn't go away. Sometimes you might have a

gastroenteritis or eat something bad or just eat too much and it'll cause reflux. And that's normal. That's called physiological reflux, but something that happens daily, that's something that should not be there.

Katie Johnson: You mentioned medications, they're commonly called PPIs, as a typical first course of treatment. How effective are those medications?

Dr. Lorant Diva...: So for PPI stands for, it's called proton pump inhibitor and a medication literally inhibits the pump that pumps up acid in your stomach. So it doesn't fix the reflux, but it just changes the content of the stomach not being so acidic. So when it refluxes, you don't feel as bad, but they actually, they are not a first, or they are the first course of reflux, but they are not the first medication used. Usually it's the over-the-counter Tums umps or even H2, histamine two blockers, such as ranitidine in the past or Pepcid. Those really should be prescribed before the PPIs, because they have less of a side effect profile.

But once those don't help, the Tums and the Pepcid, then you are prescribed PPIs. And usually they will control the typical symptoms of reflux such as heartburn pretty well. Because you are burning because there's an acid in your esophagus. So it's naturally irritating. So when you take the acid away, even though the fluid will be within the esophagus, it won't be caustic. It won't be causing the damage and you won't feel it, but it doesn't help with the non-typical or non-heartburn symptoms or side effects of the reflux, such as sore throat, chronic cough, asthma in adult, pneumonia, difficulty swallowing, feeling like food is stuck in your throat. It's called a globus sensation.

I have a patient with just an earache in the morning that was caused by reflux, and the fluid reflux all the way up to the eustachian tube of a ear and caused earache in the morning. There are more symptoms that are atypical than the typical ones, but most people don't attribute it to reflux, not even physicians. They don't contribute those extra symptoms to reflux until everything has been ruled out. But if you have a patient with, or if you are a patient with asthma onset as an adult, it's very unusual. So reflux would be, for example, in asthma in an adult would be very high on the differential diagnosis.

Katie Johnson: Very interesting. I see now why you said it is really a complex condition. You mentioned that the PPIs don't cure the reflux. They just give relief. How safe are they? You mentioned side effects. Is this a short-term, long-term solution when we talk about these proton pump inhibitors?

Dr. Lorant Diva...: Yeah, it's meant to be short-term, but I have had patients for 20, 30 years on these medications. And when you look at a bottle or when you look at the over-the-counter use, you should only take them for 14 days straight and only every three to four months. So you shouldn't be taking it more often. And then of course there is, if you need it more, then ask your physicians to prescribe it. I have patients taking Nexium they buy in Costco daily for 10 years. So people definitely don't use it as it's meant to use.

And why it's important to use it properly because these medications are associated with long-term side effects. And there is quite a few of them. And back 20 years ago, we thought that PPIs were the holy grail of reflux, and now nobody has a heartburn, but now after all these years of patients on these medications, we are coming up with studies that study how bad these medications could be and what are the side effects. So just to mention a few of them that people get worried the most about would be dementia. There's about 20 person increase chance of getting dementia over the normal population. How about also heart attacks, strokes.

Kidney disease is a big one. If you have a kidney disease to begin with, chronic one, then this is about 50% increase chance of progression of kidney disease to even failure. Liver disease. For women after menopause with osteoporosis, the calcium metabolism affected tremendously with these medications and osteoporosis and calcium content of the bone worsens and decreases. Increased risk of hip fractures. Vitamin B12 deficiency, iron deficiency. And in some things that we don't think about is changing of the biodome, the bacteria in your gut, and leading to downstream problems with the intestinal system. Your stomach is meant to have a pH of about two or one, which is very acidic, but when you take these medications, now the pH is about five to six. And the bacteria that's supposed to live at a low pH, very acidic, now it can't live. And the bacteria that's not supposed to be there now overgrows, and this can cause downstream effects in the entire GI system.

Katie Johnson: It's really quite alarming when you think about how many people take these medications, like you said, every day, maybe more than just that 14 day stretch that they're supposed to. And now learning about what those long-term side effects might be. So if we have listeners out there who are thinking, gosh, this might be me. I've been taking these PPIs for a long time, and I maybe should have concern about that, what are some other options? I know that in the past, maybe the surgical options have seemed like maybe too high of a risk, or the medication just seemed like a simpler option, but things have changed. I think you mentioned earlier in the interview that there really are some new interventions now that that can be less invasive and maybe a good solution for people in terms of switching away from long-term being on these medications.

Dr. Lorant Diva...: Yes. The treatment of reflux has changed tremendously over the last 10 years, surgical treatment. There is quite a few different options to do. Some of them with people with small hernias or very difficult to detect where the anatomy is fairly normal, then there is a minimally invasive solution without even doing any cuts on the belly. And then taking it further, when the hernia is bigger, we have to fix the hernia, which would be a laparoscopic operation. And that's combined with the reinforcing of the GE junction and the natural sphincter that we have.

So nearly all of these operations are done laparoscopically with four or five small, tiny incisions in the same way as we take out an appendix or gallbladder

these days. So the outside, it doesn't look like a big operation, even though on inside it's a pretty significant one, but recovery is fairly fast.

But what I was going to also talk about was with people being on these medications for so long and nobody has addressed this, I think anybody who is on PPIs for six months to a year, they deserve a consultation with a reflex specialist. Just because we know that about 20% of people taking the PPIs long-term, they don't need to be on these medications. They get prescribed and the prescription just carries over and over. And this medication is not doing anything, just causing side effects, and they don't need to be on the medication. So during my work-up for reflux disease, I actually test the people that are taking the medication to see if they even need those medications, or sometimes even try to downsize them to less side effects causing medications, such as Pepcid or just Tums if they can. But ... yes. Go ahead.

Katie Johnson: Yeah. That's a really good point. That maybe just going for a consultation doesn't necessarily mean that surgery is next. Maybe you don't even need the medication anymore.

Dr. Lorant Diva...: Oh, absolutely. I wouldn't say that ... For the patients that I see, maybe one in five will end up with an operation. Then out of the five patients, maybe three will end up with an endoscopy and the testing, and one of the five patient, I tell them that, yeah, you don't have reflux. So try to not take absolutely anything. This is caused by something different.

Katie Johnson: The initial appointment and assessment maybe is something to talk about a little bit more. From what I've learned in talking with Sarah in your office and others is that this initial appointment and assessment is really quite valuable for the reasons that you just mentioned and also involves cancer screening. Esophageal cancer can be closely linked to some of these symptoms too.

Dr. Lorant Diva...: Oh, absolutely. One in 10 patients with reflux will have a bad precancerous condition of the esophagus, which is called Barrett's esophagus. And one in 10 patients with Barrett's will end up having esophageal cancer, which is one of the worst cancers to have. During our work-up, we screen for this precancerous condition. And then if the patient is unfortunate enough that they have this precancerous condition, then they fall into this very aggressive screening protocol and biopsy protocol that we have to ensure that after we fix the reflux or adjust the medication treatment or do whatever we need to do, that the cancer doesn't develop and the precancer doesn't progress. But it is important. It's pretty much one in 100 people with reflux will have, in their lifetime, esophageal cancer, which is a big number. If you think about it, there is about a hundred million people with reflux disease.

Katie Johnson: That is a big number. So we're really fortunate to have someone with your knowledge and expertise and experience in this area on the team, doing these assessments and consultations right in Elbow Lake and Morris and a member of

the Lake Region and Prairie Ridge team. Can patients make an appointment directly with you or do they need to be referred from their primary care provider or either/or? How does that work?

Dr. Lorant Diva...: Either is just fine. They can look up online on our website, the phone number to our clinic and they can be self-referred. Or if they are seeing their primary care provider, they can talk to them. They have reflux, been on medications, they would like to see other solutions. And they know that Dr. Divald in Elbow Lake is treating this and he's a specialist in the field. There's no barrier for referral, but patients can be absolutely self-referred. Maybe 30% of my patients, they come self-referred.

Katie Johnson: Anything else you want our listeners to know about the topic of GERD and reflux, heartburn, the medications or the treatments that you provide?

Dr. Lorant Diva...: I think just to recap and just to ... so patients know. When they're taking the medications for reflux for a really long time, they need to be screened, making sure they do not have a precancer or cancer, or they don't even need medications to begin with. And the best way to do it is do it with a specialist. Unfortunately, primary care physicians, even general surgeons, they're not specializing in this. They don't have the access to the tools that we can do and do the proper work-up, including biopsies or measuring of the reflux and the quantity, how much that happens.

So it's the best way to start it somewhere where we can complete the whole work-up if need be. And then they don't need to be worried that if they come see me, that they're for sure getting a surgery. It's like we said, it can be just very downsizing the medications or taking them off of the medication and looking for a different reason, or different cause for the symptom. And if everything is fine and they are doing the right things, then it will just reinforce them. They will be reassured that they're doing the right thing.

Katie Johnson: Which there is a lot of peace of mind in that too. One question I forgot to ask you about these surgical options. There's a couple of different ones that you offer from what I understand. Are they outpatient? Does it require an overnight stay? When you say minimally invasive, that can be kind of a vague term. What does it actually look like?

Dr. Lorant Diva...: Yeah. So if people end up having an operation, then it's an overnight stay. Literally all my patients, they could have gone home the same day, but I do keep them overnight to see how they feel in the morning and how they're doing with eating the next day. The operation lasts anywhere between hour and a half to about three hours, depending how difficult is to fix the hernia, if we have to fix the hernia. And the recovery is something that I talk to my patients in quite a bit of detail during the consultation, or once we determine that they are heading towards operation. Because it takes about six weeks for the patients to adjust to the new way, how the plumbing of the esophagus and stomach works.

Just because people see me, there is no barrier of the acid to go up into the throat. Just like there's no barrier of the food and water to go down from the mouth to the stomach. So things will change in a way that they'll have to make another roadblock for the acid to go up. So there'll be a roadblock book for the food to go down. So that's the reason why we pay so much attention to the preoperative work-up. So we do the right operation on the right patients. There is literally 10 different ways how to fix the reflux and fix the hiatal hernia. So it's done the proper way and the right operation for the right person at the right time. And that's why it needs about a month of a work-up with three to four different tests to determine which is the right operation for the patient.

Katie Johnson: One night in the hospital and, what, six weeks of retraining to get a lifetime off of the medication and to get away from those side effects seems like a pretty good trade-off.

Dr. Lorant Diva...: Yeah, it is. I wanted to say that so far over the last three years, we have about a 95% success rate to get people completely off of all antiacid medications. Overall, when you look at the studies published from the initial operations, they are about 70% successful. And then now we have about 85 to 90% in the United States using the latest technology. But in our practice it's been a little bit more than that, but again, it's just a single center. So you can't really use the data. Not nationally, but the patient can count on about 85 to 90% chance of getting completely free of antiacid medications.

Katie Johnson: That is a fantastic success rate. Well, Dr. Divald, thank you so much for your time this morning, sharing great information about GERD, reflux, heartburn. How to identify it, maybe early management tips. How to know when it's chronic and what to do in those situations. Learning more about PPIs and the long-term side effects and what the surgical options are. It's been extremely informative, and, again, so fortunate to have Dr. Lorant Divald on the team practicing both in Elbow Lake and Morris at the Prairie Ridge Healthcare locations for Lake Region Healthcare. And again, thanks for your time this morning.

Dr. Lorant Diva...: My pleasure to be here. Thank you for having me.

Katie Johnson: Dr. Lorant Divald and Katie Johnson this morning on Apple a Day reminding you, there is so much to do here, stay healthy for it. Have a great day.