“Hadassah on Call” podcast with Dr. Ronen Leker

Benyamin Cohen:

This is “Hadassah on Call: New Frontiers in Medicine.” I'm your host, Benyamin Cohen. In each episode of this podcast, we'll get an inside look at what goes on behind the scenes at one of Israel's premier medical centers. We'll travel to Jerusalem to meet up with the doctors and nurses at the Hadassah Medical Organization. From striving for peace through medicine to performing surgeries with robots, they're working on medical breakthroughs that are impacting people around the world. That's what Hadassah is all about: the power to heal our world together. From cornea transplants to developments in pediatric oncology, we'll learn about the latest cutting-edge research coming out of Hadassah Hospital. All that, plus the inspiring stories of patients who have recovered from near-death experiences. Our appointment starts now. This is Hadassah On Call.

Benyamin Cohen:

Hello, everyone, and welcome to the show. Our guest today is Dr. Ronen Leker, the Director of the Stroke Unit and Stroke Center at Hadassah Hospital in Jerusalem. Dr. Leker has been actively involved in stroke research for over two decades at both Hadassah and at the National Institutes of Health in Bethesda, Maryland. Today, we'll be talking with him about what causes strokes, why young people who had COVID are at risk of strokes, and the latest research being done to help stroke victims. Doctor, welcome to the show.

Dr. Ronen Leker:

Thank you.

Benyamin Cohen:

Where are we reaching you today? You're at the hospital still?

Dr. Ronen Leker:

I am at the hospital still. It's only 3:00 PM in the afternoon, so it's early-going for me.

Benyamin Cohen:

Mid-day. It's even earlier for me here in the United States.

Dr. Ronen Leker:

I can imagine. Yeah.

Benyamin Cohen:

So you're the Director of the Stroke Unit and the Stroke Center at Hadassah Hospital in Jerusalem. I'm just curious. Was there a reason you decided to specialize in strokes?

Dr. Ronen Leker:

Well, since being a medical student, my main interests were cardiology and neurology, so stroke combines the best of both worlds. For me, that was pretty obvious since the time I started my residency. So vascular medicine is important, and cardiology is important, and neurology is important. Stroke combines both. Here I am.

Benyamin Cohen:

So, is that where the impact of a stroke is, is in the brain, or it's a neuron?

Dr. Ronen Leker:

Stroke is a vascular disease that affects the brain. It can be either an occlusion of a blood vessel, which can be outside of the brain or inside the brain itself, but it leads blood to the brain, or it could be due to a rupture of a blood vessel leading to exit of the blood from the blood vessel into the brain tissue itself, but in all these cases, the brain is the affected structure. Affecting the brain, you have implications in the body.

Dr. Ronen Leker:

If you injured the tissue in the brain that is responsible for language facilities, for example, you're going to have language problems. You won't be able to understand what people are saying to you, and you won't be able to find the correct word to respond to them. If the affected area controls, let's say, your muscles on your right side of the body, you won't be able to move your right side, and sensory capabilities are basically the same. If you affect the areas in the brain that receive sensory information from the body, you're going to be affected with hemisensory deficit, meaning that you won't be able to sense anything on one part of the body, on one-half of the body.

Benyamin Cohen:

Are there more people who are at risk? I'm in my mid-40s. I don't think anyone in my cohort that I know of has had a stroke. I normally think it's someone who's older, but is that a myth, or it can affect anybody?

Dr. Ronen Leker:

It is a myth. It is a myth. Everybody can have a stroke, from toddlers to people in their 100s, so the risk is higher as you age. But still about 25% of the strokes are younger than 50, so there's a nice sizeable proportion of patients who are young, relatively – including children who can have a stroke. Stroke, basically, I think it's important to understand that stroke is a bag of diagnoses. It's not a single diagnosis. It's not a single disease. It's a combination of several disorders that can cause a stroke, so depending on,

for instance, if you have a heart condition like an arrhythmia that is called atrial fibrillation, you're going to be at a high risk of stroke.

Dr. Ronen Leker:

Also, if you are a child, and you have a problem in one of your heart valves, you are going to be at a higher risk of stroke, even though you're a child. If you're a young woman, and you have hypercoagulability syndrome, genetically predisposed to hypercoagulability, or you have a hypercoagulable state that is secondary to another disease, you are going to be at a higher risk of stroke, although you're young, so age in itself is a risk factor for stroke, so the older you get, the higher the risk of stroke, but still some of the strokes can occur in younger folks.

Benyamin Cohen:

What are the symptoms that you know if you're experiencing a stroke?

Dr. Ronen Leker:

Well, if you have a sudden onset of stroke, it's almost always a sudden onset of neurological, focal neurological deficits, which could be either weakness or numbness or paralysis on one side of the body compared to the other or one limb compared to the other side. So if you have a right hand is weak all of a sudden, you can't move it, you can't speak, or your speech becomes unintelligible, or if you have double vision that occurred suddenly, or if you have any asymmetry in your face.

Dr. Ronen Leker:

Actually the best way to diagnose a stroke is an acronym called FAST: so Face, Arm, Speech, and Time. Basically, you look at the face of the individual that's across from you. You ask them to smile. If their smile is asymmetric, they might have a stroke. You ask them to raise their arms, so that's the arm part. If one of the arms droops, it's a sign of a stroke, and you ask them to talk. If their speech is unintelligible or they're unable to speak or to comprehend what you're asking from them, they might have a stroke, so these are the main risk factors, the main symptoms of stroke. The point to remember is that the onset is abrupt, and it usually affects one side of the body, not the entire body.

Benyamin Cohen:

So if someone's experiencing a stroke, how much time do they have to get to a hospital? Is it five minutes? Is it an hour?

Dr. Ronen Leker:

No time.

Benyamin Cohen:

No time. It's like a heart attack. It's instant.

Dr. Ronen Leker:

The sooner you get to the hospital, the more likely are you to get treatment and the more likely you are to get treatment that will be effective in minimizing the damage. So when you have a stroke, there's an area of the brain that is immediately irreversibly damaged. This area is called the ischemic core.

Surrounding this area is an area called penumbra, in which in which the tissue gets low blood supply, but it's not dead yet, so the cells still survive, but they're dwindling between life and death.

Dr. Ronen Leker:

If you arrive early to the hospital, we can either administer a drug that will bust the clot, which is called TPA, or we can retrieve the clot with an endovascular approach and just put in a device that will pull it out from the occluded segment of the artery, and then the blood flow is restored. If we do it early enough, you're going to be left with only that initial minimal damage. The longer you wait at home, the risk of this area called the center of the damage to grow into the penumbra is high, so the more you wait, the more it grows into the penumbra until it basically covers all of the penumbra, and then you have no tissue at risk that you can actually rescue.

Benyamin Cohen:

So is that why you have some strokes that are mild and people can recover and some strokes where they can't recover?

Dr. Ronen Leker:

Well, there is a whole line of explanations why some people recover and some don't, but they have to do with age, with comorbidities – so the younger you are, the more likely you are to recover because you have a lot of brain reserve tissue that basically other cells in the brain can take control over the function that was lost in the stroke so that you can recuperate better. The older you get, the more strokes you've had previously, you're not going to have the same brain reserve, and so your ability to recover is going to be reduced. But it also has to do with comorbidities, with how large the stroke was initially. If you have a very large stroke, the chances of recovery are slim.

Dr. Ronen Leker:

I know people do it, but it's wrong to compare yourself to another patient because no two strokes are the same: They don't have the same age. They don't have the same previous medical history. They don't have the same history of previous strokes. They don't have the same vascular supply on the other unaffected side. So it's really impossible to predict how one patient is going to do based on what another patient did. Like I said in the beginning, strokes are complex, and they're basically a bag of disorders, not a single disorder, and also the reason for the stroke affects your chances of recuperation. For instance, we know that strokes that occur in women with atrial fibrillation carry the poorest outcomes compared to younger patients who have non-cardioembolic strokes, lacunar strokes, for that matter.

Benyamin Cohen:

I've heard of a term called silent stroke.

Dr. Ronen Leker:

Yes.

Benyamin Cohen:

What does that mean, and are certain people susceptible to them?

Dr. Ronen Leker:

So, basically, we've talked earlier about the cardinal symptoms of stroke: language difficulty, weakness on one side of the body, et cetera. But some strokes affect the brain in an area that is "silent." It's not really silent. It's just that it doesn't have any motor implication or any language implication that you can see straight on when you were examining the patient doing this past drill that we alluded to earlier, but they mainly affect the areas of the cortex in the frontal area of the brain, and they have significant cognitive implications. So if you do a cognitive test on the patient, usually, especially if the patient has multiple strokes like that over the period of several years, that carries a high risk of turning into what we call vascular dementia, which is a very significant cause of dementia.

Dr. Ronen Leker:

So, as you know, people think, mistakenly, that all dementias are Alzheimer's disease, which is a degenerative disorder. But about 50% of dementia cases or demented patients have strokes as the cause of the dementia. So these "silent" strokes are not really silent. They can cause significant morbidity in terms of cognitive outcomes. You've asked if some people are at higher risk than others. Yes, so patients who suffer from hypertension, hyperlipidemia, and diabetes are at a higher risk of developing these small vessel strokes or lacunar strokes, and as these lacunar strokes accumulate, they can lead to vascular dementia.

Benyamin Cohen:

When you think about diseases like Alzheimer's or multiple sclerosis or cancer, these are all diseases that have slow declines, but a stroke is more like one day you're fine and the next day you're not. How do your patients deal with this sudden loss?

Dr. Ronen Leker:

There is an emotional setback and many patients, especially if they have larger strokes and they are incapacitated from one minute to the next, they tend to get depressed, which is bad because when a patient is depressed, they do not do well in rehab. So when you're depressed and you have no mood to get out of bed and start doing rehab, you don't cooperate too well with the physical therapist and with the occupational therapist and the speech therapists. Then you are just left with the disability, so we are pretty sensitive to detecting depression in these patients, and this is not your typical psychiatric patient with primary depression. This is depression secondary to the physical condition that they are forced into being handicapped, so we treat quite broadly with antidepressant drugs.

Dr. Ronen Leker:

Trials have shown that this practice leads to a better outcome and less depression in patients. Although, the topic is a little bit problematic because two recent trials have failed to show the effect of fluoxetine on motor outcome, on post-stroke fluoxetine, which it's an antidepressant, on outcome, but they both showed a much lower risk of post-stroke depression in patients who were treated with the drug. So we are still treating a very high proportion of stroke patients, almost all of them with antidepressants on top of the preventive medications that I'm sure we'll talk about in a second or two.

Benyamin Cohen:

When we return, Dr. Leker talks about his novel treatment methods for stroke victims. Plus, how some COVID long-haulers are experiencing neurological issues.

Dr. Ronen Leker:

The long-haulers – and some of those complain of mental problems, of memory impairment, concentration impairment, long-term fatigue, et cetera.

Benyamin Cohen:

All that, and much more after a quick break.

Benyamin Cohen:

With the COVID-19 vaccine now being delivered across the globe, Hadassah Hospital is at the forefront of caring for patients in a post-pandemic era. Hadassah recently opened a multi-disciplinary clinic to help treat people suffering from COVID after-effects – everything from lung damage to mental health issues. Keep up to date with everything that Hadassah Hospital is doing to help combat this deadly disease by visiting our website at hadassah.org/covidupdates. That's hadassah.org/covidupdates. We're posting frequently about how our doctors, nurses and researchers are working to roll out the vaccine and prevent the further spread of COVID-19. You can also follow Hadassah's latest coronavirus updates on our social media accounts on Facebook, Instagram and Twitter.

Benyamin Cohen:

Now, back to our conversation with Dr. Ronen Leker.

Benyamin Cohen:

I want to talk for a few minutes about COVID.

Dr. Ronen Leker:

Sure.

Benyamin Cohen:

In the wake of COVID-19, we've seen many people who reported memory loss or neurological issues. Many of us assumed COVID-19 was primarily a respiratory disease, but I'm wondering. Has it also increased the risk of neurological problems?

Dr. Ronen Leker:

Yes, it did. So we all know that COVID affects not only the cells in your lungs but also cells in blood vessels and also cells in your heart and also in the brain directly, so postmortem studies have shown viral inoculation of endothelial cells in the brain and also brain tissue itself and also cells in the heart. So it can affect the brain by causing stroke, by causing aseptic meningitis, and by causing a variety of other neurological complications, including Guillain-Barré, including myelopathy. So it does cause quite a lot of neurological disorders, even exacerbation of myasthenia gravis. First detection of myasthenia gravis have been reported, but the overall number of patients with neurological identifiable disorders is relatively low. It's not that high.

Dr. Ronen Leker:

For instance, in my realm of stroke, we did detect a higher incidence of stroke in younger patients without any risk factors, and this was published globally. We were lucky, my team and myself, to be part of a global team that looked at COVID and stroke and also for another research endeavor that looked at

stroke in Europe during the COVID era. We were able in both these studies to detect actually an increase in the number of stroke, of large vessel strokes in patients that were younger than 40 or 55, in the other study, and who had no common risk factor for stroke such as hypertension, diabetes, et cetera, so this was interesting.

Dr. Ronen Leker:

In the context of COVID, the fact that COVID can cause heart problems, including arrhythmias and including clots that form in the heart, and then from myocarditis or from the arrhythmia, then they can flow to the brain and occlude the vessel in the brain, or they can cause vasculitis in the brain itself, but interestingly enough, we hypothesized, like you suggested, that there might be people there with silent brain infarctions secondary to the COVID. So we conducted a small pilot study here at Hadassah where we did MRI on volunteers who were COVID patients who were recuperating from the COVID, who basically were sick, were admitted to the hospital. Upon their discharge from the hospital, when they felt all better and the COVID cleared, we did a brain MRI to see whether they might have suffered silent brain infarctions, and we couldn't find any. So this is very reassuring in a way.

Dr. Ronen Leker:

You might have noticed that I mentioned identifiable disorders because there are a lot of COVID patients or COVID survivors who come and say, "Well, I have this ongoing tingling in my face. I have this ongoing numbness in my arm." Sure enough, you do an MRI of the brain. You do an MRI of the spine. There's nothing. We can't see anything. So no stroke, no inflammatory disease, no nothing. We can't really classify these symptoms. They're not a stroke. They're not a myelitis. They're not acute disseminated encephalomyelitis. They're not MS. We don't know what they are, but we've seen quite a lot of those.

Dr. Ronen Leker:

Also, we've seen quite a lot of neurological symptoms in patients who received the vaccine. Again, none of those had any identifiable disorder, nothing that we can put our hand on it. And for the most part, they were all transient, all these sensory abnormalities, people complaining of tingling in the face, tingling in the arm a short while after getting the vaccine or when they recuperated from the COVID itself, but there's nothing on imaging. Again, all of these were transient. There is a chronic COVID syndrome.

Benyamin Cohen:

The long-haulers?

Dr. Ronen Leker:

The long-haulers, and some of those complain of mental problems, of memory impairment, concentration impairment, long-term fatigue et cetera. But again, I mean, we can't identify anything wrong in their brain per se, which doesn't say much. It just says that it's maybe below the detection capability of our MRI scans.

Benyamin Cohen:

Was 2020 one of the most difficult years for you as a doctor?

Dr. Ronen Leker:

In some senses, it was, and in some senses, it wasn't. It's very challenging to see patients with masks on, and you have to be very strict about wearing the mask, and patients and their families, try to keep social distancing as much as you can, so to lower the risk of getting infected yourself. I think that the hospital administration here at Hadassah did a very good job at protecting us, physician and staff in general, nurses, et cetera from getting COVID infections because it makes sense. If the doctors and nurses and all the hospital staff gets COVID, who's going to treat the patients. Right?

Benyamin Cohen:

Mm-hmm (affirmative).

Dr. Ronen Leker:

They were very strict about it, and in some instances it was, okay, we understand that. It's for our own protection, but for patients and their families, you could sense that it's a little bit problematic. They can't really visit freely in the hospital. They couldn't. Now they can, of course, but when the COVID was in its peak, people were afraid to come to the hospital. They were afraid to visit their grandfather who had a stroke, and there's nobody visiting. It was a little tricky in that way.

Benyamin Cohen:

Yeah. I want to talk a little bit about the treatment for stroke. I guess let's start, as they say in Hebrew, *beresheet*, at the beginning. Is there anything that can be done? Is there a surgery or a medical procedure that can be done to prevent a stroke?

Dr. Ronen Leker:

Sure. So, if you have the conventional risk factors for stroke such as diabetes, hypertension, obesity, or if you smoke, you can minimize the risk of having a stroke by preventive medicine –meaning that you have to get your life in order. You have to work out on a regular basis, 30 minutes per day of walking, swimming, whatever. You have to eat right. You have to stop smoking, and you have to lower your cholesterol and maintain a normal blood pressure of lower than 130, 135 over 80, 85, and you have to control your diabetes if you have diabetes.

Dr. Ronen Leker:

The way I explain it to my patients, we differentiate the risk factors for strokes into modifiable and non-modifiable, so I cannot modify your age. I cannot modify your gender, and I cannot modify your genetic profile. But I can modify your hypertension. I can modify your cholesterol level. I can modify the diabetes. I can modify the lack of exercise if you have that, and I can modify the smoking and your diet. So if we can modify these risk factors, we're going to minimize the risk of stroke.

Benyamin Cohen:

You were talking about diet and exercise. Obviously, eating healthy is important. Are there specific foods? I was thinking I was reading something about seafood, how a seafood diet can impact.

Dr. Ronen Leker:

It's not seafood. It's actually a Mediterranean type of diet.

Benyamin Cohen:

Oh, okay.

Dr. Ronen Leker:

A Mediterranean type diet is what people around the Mediterranean Basin eat, which means more olive oil instead of vegetable oil, veggies and fruit that are high in fiber content and low in sugar and more fish instead of red meat. So again, you don't have to go absolutely berserk about it and stop eating red meat altogether, but just reduce the quantity of red meat consumption and increase the quantity of fish and poultry.

Benyamin Cohen:

Again, speaking about lifestyle, how much does sleep play into a stroke? Can you have too much sleep? Is that a thing?

Dr. Ronen Leker:

Yeah. I mean, lack of sleep for sure is related to higher risk of stroke because it increases your blood pressure, and there's also abnormal sleep patterns such as obstructive sleep apnea, which is considered a risk factor for stroke, so patients who are obese or overweight and patients who their spouse complains that they snore loudly are probably suffering from obstructive sleep apnea, so we send those patients to a sleep lab test. If they are indeed shown to have obstructive sleep apnea, they're prescribed a device that's called CPAP, continuous positive airway pressure, and they sleep with that during the night, so it reduces the blood pressure, and it reduces their waking up and reduces the risk of stroke. You mentioned oversleep. That has been related also, yes, to a higher risk of stroke.

Benyamin Cohen:

I was reading, I think, that veterans with PTSD and people who suffer from PTSD have a much higher likelihood of suffering a stroke. Is that true?

Dr. Ronen Leker:

I'm not aware of any studies that directly measured the risk in patients with PTSD. Although, I can imagine that people who are stressed during their day and easily become nervous and easily become violent, their blood pressure is going to be high. Their sugar level is going to be high, and their cholesterol is going to be high, so it puts them at a higher risk of stroke via those mechanisms.

Benyamin Cohen:

When we last spoke to you, you discussed how your research with stem cells is working to reverse some of the disability that could come from a stroke. I think at the time you were doing it with animals.

Dr. Ronen Leker:

Right.

Benyamin Cohen:

Can you give us an update on it?

Dr. Ronen Leker:

Well, unfortunately, there is nothing to update on because it's been very challenging to raise money to do a study in humans. The main reason is that this is not a patentable area. What we were doing in our research in animals, we were trying to manipulate the endogenous neural stem cells, cells that reside in your own brain. We were trying to increase their number and to drive them into neuronal differentiation, meaning into becoming a neuron that will replace the dead cells, by playing with some chemicals in the brain that we got from other cells, from platelets. Unfortunately, drug companies shy away from this because they cannot get a patent on this, and if they cannot get this patented, they cannot get money.

Dr. Ronen Leker:

If they cannot get money, they're not in the game. Which is sad because I think humanity might have done better without these financial incentives, but since everything is financial, we can't get any funding to do such a study. We tried to interest several of the drug companies in Israel and abroad in doing such a study, and nobody was interested because of a lack of patent ability and lack of foreseeable profits. Ideally, a government such as the Israeli government or the US government, for that matter, the NIH could have supported such a study, but reality is that nobody wants to support it.

Benyamin Cohen:

Are there ways that you can reverse? I mean, is there existing medicine?

Dr. Ronen Leker:

Like I said, in the beginning of the session, if you come early enough to the hospital, we can give you a medication called TPA. Now there's another one called TNK, which is not licensed yet in Israel. It's licensed in Australia and some of the European countries, and I've heard that people are using it in Texas now, although I think it's off-label. These drugs that are administered intravenously can break the clot, and then the blood is basically coming back to the brain.

Dr. Ronen Leker:

The other way to do it is to remove the occluding clot from the artery by doing a catheterization, so we go in either through the femoral artery in your leg or through the brachial artery in your arm, and we put a catheter system like they do for heart patients, for instance. We go up to the brain with this navigation system with the catheters, and we just suck the clot out of where it was sitting. Then we restore the blood flow to the brain, so these two strategies can be done, and they basically revolutionized the treatment of stroke, basically. So patients who would be dead, let's say 10, 15 years ago, are now very much alive.

Benyamin Cohen:

When we return, Dr. Leker explains how his field has changed in the past two decades. Plus, he reveals how his patients inspire him.

Dr. Ronen Leker:

It's amazing how many new things you learn and how you learn from each patient and how they can teach you humility.

Benyamin Cohen:

All that and much more after a quick break.

Dina Kraft:

I'm Dina Kraft, the host of a podcast called “The Branch,” which tells the stories of relationships between everyday Israelis and Palestinians, Jews, and Arabs. Amid conflict, entangled histories, stories of human connections and friendships can get lost. The mission of this podcast is to find them and bring them to you. In this season, I talk to artists, midwives, soccer teammates and environmentalists. All of them and many others, too, who work together in spite of the barriers between them. “The Branch” brings you stories of real people forging strong connections and having important conversations, even when it's complicated. Brought to you be Hadassah. Find us anywhere you listen to your podcasts or Hadassah.org/thebranch.

Benyamin Cohen:

And now, back to our conversation with Dr. Ronen Leker.

Benyamin Cohen:

Can you tell us the story of an inspiring patient that you had?

Dr. Ronen Leker:

All patients are inspiring. There is no such thing as a patient who is not inspiring. You are basically learning on the go. It's a great profession as a medical doctor to be in neurology and in stroke neurology because even at my age, it's amazing how many new things you learn and how you learn from each patient and how they can teach you humility. I think it's awe-inspiring. People who are severely impaired, and they still maintain their self-awareness, self-dignity, and they keep their morale, and they go to physical therapy. Then a few months later, you see them and they can walk. It's amazing. It's really amazing, so we have a lot of those.

Benyamin Cohen:

How has your field changed in the last couple decades?

Dr. Ronen Leker:

Well, I think the main change has come from these endovascular procedures, from brain catheterization that I mentioned earlier. We were among the first in the world at our center to implement this form of therapy in stroke. We've been doing it since 2002. And we were among the first in the world to use a technique called stentriever, which is basically a stent that retrieves the clot. This has really changed the game because beforehand we were successful in removing the clots with the endovascular approach but not as successful as we are now. Now almost 90%, 95% of the time, if a patient is eligible, of course, for endovascular therapy, we can remove the clot and restore blood flow.

Dr. Ronen Leker:

That doesn't necessarily say that the patient will completely recover, obviously. There's always some deficit left, but for many patients, it's a game-changer because like I said earlier, these patients with a 85, 95% probability of dying, now there's a 60% chance that they will be independent at three months, not just survive but survive independently, which means they're not dependent on other persons or on

any other devices to ambulate. They don't need the wheelchair. They don't need the walker. They don't need the cane, and they're independent.

Benyamin Cohen:

You obviously are in a very stressful environment. I mean, all doctors are, but I think doctors dealing with neurological issues and strokes, it's very stressful. What brings you hope?

Dr. Ronen Leker:

We've talked about inspiring patients and the revolution that has occurred in neurology, so you see patients that were basically, and I was lucky enough to be part of that history and history making, so it makes me very proud, and it makes me very happy to see patients that would otherwise die. Then you come the next morning, and you see them doing well and independent. Just yesterday, I saw this gentleman who came in with a very large right carotid artery occlusion, large stroke, was completely paralyzed. Professor Cohen, my colleague, who's the endovascular neurosurgeon at Hadassah, was able to remove the clot, and the patient came yesterday for a one-month checkup after the stroke. He's walking. He's joking, telling me jokes.

Benyamin Cohen:

Wow.

Dr. Ronen Leker:

You know? What else can you ask for, right? This is what we do as doctors, right? We're supposed to help patients. We salvaged this patient. We saved him from absolutely surely death, and he's sitting in my office the next month and joking with me about praying or not praying to God, you know?

Benyamin Cohen:

Yeah. Doctor, I like to end all my interviews with this question. Is there anything I did not ask you that I should have asked you?

Dr. Ronen Leker:

Nope. I think you did a pretty good job. I enjoyed it.

Benyamin Cohen:

Okay, me too, me too. This has been great. Well, I know you're super busy, and I really appreciate you taking time out of your day to chat with us on the “Hadassah On Call” podcast. Thank you so much, Dr. Leker.

Dr. Ronen Leker:

Sure, pleasure. Bye-bye.

Benyamin Cohen:

Shalom.

Dr. Ronen Leker:

Shalom, shalom.

Benyamin Cohen:

“Hadassah on Call: New Frontiers in Medicine” is a production of Hadassah, The Women's Zionist Organization of America. Hadassah enhances the health of people around the world through medical education, care and research innovations at the Hadassah Medical Organization. For more information on the latest advances in medicine, please head on over to hadassah.org/news. Extra notes and a transcript of today's episode can be found at hadassah.org/hadassahoncall. When you're there, you can also sign up to receive an email and be the first to know when new episodes of the show are released.

Subscribe to our show on Apple Podcasts, Google Play or your favorite podcast app. If you haven't already, please leave us a review on the Apple Podcast store. It only takes a minute and when you do, it helps others discover “Hadassah on Call.” The show is edited by Skyler Inman and produced by the team at the Hadassah offices in both New York and Israel. I'm your host Benyamin Cohen. And thanks again for joining us today. We'll see you next month.