



Multiple Sclerosis  
Association of America

## Healthy Aging with MS

Presented by:

Lana Zhovtis Ryerson, MD

### **Yahaira Rivera:**

Hi. Good evening, everyone. Welcome and thank you for joining MSAA's live webinar, "Healthy Aging with Multiple Sclerosis" presented by MS specialist Dr. Lana Ryerson. This program is part of MSAA's MS Awareness Month campaign. I'm Yahaira Rivera, Director of Mission Delivery and Program Development for MSAA and your host for the program this evening. Before we get started, I would like to take this opportunity to give you some background information about MSAA and share some reminders and housekeeping items.

MSAA is a national nonprofit organization dedicated to improving lives today through vital services and support for the entire MS community. Our services include a national helpline, providing English and Spanish services Monday through Friday 8:30 a.m. to 8 p.m. Eastern Time, and equipment and cooling distribution programs with products designed so improve safety, mobility and to help with heat sensitivity. Additionally, we have an MRI access fund. These two programs are available for individuals living with multiple sclerosis who qualify for assistance. MSAA also offers educational programs, online tools and publications, digital resources to help you stay informed, make decisions, and track disease activity. Lastly, we offer support through community connection to help you stay connected with other members of the MS community. All of our programs and services are available to people living with multiple sclerosis nationwide. To learn more about MSAA's programs, services and events, please visit our web site, [mysaa.org](http://mysaa.org), or give us a phone call to speak with one of our wonderful helpline specialists.

During tonight's program, you will have the opportunity to ask questions by typing them into the chat box or by using the Q&A tool. We are going to do our best to answer your questions during the Q&A portion of tonight's webinar. At the end of the program, we ask that you please complete a brief survey that will appear on your screen. Your feedback is extremely important and will help us in developing future programming and content. A link to the survey will also be included in the chat box. Also, please note that this program will be recorded and will be made available on demand on the MSAA MSi-website in the upcoming weeks. As a friendly reminder, please note that this program is for informational and educational purposes only and does not constitute any formal recommendations. Please speak with your doctor or healthcare provider if you have any questions or concerns.

Now, without further ado, I would like to introduce you to our speaker this evening. Dr. Lana Ryerson is a board-certified neurologist with a special focus on multiple sclerosis. She earned

her medical degree from the University of Rochester School of Medicine and Dentistry, and received her neurology training at Mount Sinai Medical Center in New York. Additionally, Dr. Ryerson completed a fellowship in multiple sclerosis at NYU Langone Medical Center, where she has worked for over a decade and will remain an adjunct associate professor of neurology. She has extensively published on best practices for the utilization of disease-modifying therapies. Dr. Ryerson has devoted her career to developing and providing comprehensive and compassionate care to those afflicted with multiple sclerosis and other immune diseases affecting the central nervous system. She hopes to further the understanding and improve treatment options for multiple sclerosis patients through clinical research. Welcome, Dr. Ryerson.

**Dr. Lana Ryerson:**

Hi, and thank you so much. It's such an honor to speak with you today. Thank you to the MSAA for putting this presentation together and inviting me to speak with you this evening. This is such an exciting topic, healthy aging with multiple sclerosis. It's exciting to me because this is a really brand new type of conversation we're having about multiple sclerosis. Our medications are finally bringing us to the point where patients are feeling well, where patients are getting older, where the life expectancy of an individual with multiple sclerosis is pretty much in line with the general population. So it's just exciting to have this now kind of point of view about healthy aging with multiple sclerosis. So again, thank you for the invitation and thank you for coming and listening to this presentation today.

So our objectives for the evening are as follows: We're going to get a general overview of what we mean by aging with multiple sclerosis. We're going to talk about the challenges of identifying a way that we think about disability with multiple sclerosis and kind of the slow progression of things slowing down as you get older. How do we tell the difference and can we tell the difference? We're going to talk about comorbidities with multiple sclerosis, something that happens that is an issue that becomes more important as patients get older. We will also touch upon the role of medications in aging MS population. Finally, I would like to share with you a way that other MS patients who are getting older think about healthy aging and then perhaps offer you three steps to age exuberantly that is provided by somebody who is a little older than I am.

So let's get started. So there have been, as I've already mentioned, there have been significant advances in treatment and management of MS. And this has led to MS patients' life expectancy to be almost equal to the general population. You know, again, I can't speak enough to how exciting that is; how much, how far we have come in the last two decades with MS therapies. But aging produces deep changes in the immune system, drug metabolism and how we... and how that interacts with the MS pathology and the medications that we offer for our MS patients is a reason to pause and to think, which we're just starting to do, and now we'll go into more of those details later.

As you all know, older age is also accompanied by greater risk of developing other health issues. And unfortunately, having MS does not prevent anyone from getting any of the other cardiovascular or other disease processes as you get older. And so, but with that, as one accumulates more health problems and neurologists and a patient may be more cautious about starting disease modifying therapy the more comorbidities a patient has. And that's just something that we, as a neurologist seeing a patient who is getting older in my center, it's something that has to enter our kind of point of views and how we think about the patient.

Okay. So let's talk about some of those challenges in aging with MS. Specifically, the biggest challenge I find is that it's very difficult to distinguish between normal aging phenomenon from that of worsening MS and to identify, and then to also then parse out what we would consider MS symptoms getting worse, even meaning that there is neurological symptoms that may be getting worse, but those may also be very common in aging and it may mimic some of the MS symptoms. And so it becomes very important for us to spend more time with our patients to try to kind of separate the two. And there's different ways that we can go about doing that.

So, for example, one symptom that I would want to give you an example of is cognition. As many of you know, cognition impairment is a very common problem in MS. People quoted as to be about 40 to 75%. And this can occur really at any point in the disease course, but certainly happens the longer a patient has MS. Obviously, cognitive impairment has higher prevalence rates in older individuals. And when somebody who has the disease for a long time comes into the clinic complaining of cognitive issues, how do we parse out what's MS versus what potentially could be a dementia, like Alzheimer's or perhaps just mild cognitive impairment that we may see with aging?

So there are different ways that we can parse that out. So, in MS, we very much now understand the various types of cognitive issues that a patient may have and the cognitive abilities that are most affected with multiple sclerosis are processing speed, visual perceptual skills and informational acquisition and those type of cognitive abilities or disabilities. Look different in dementias, for example. And so for us, the way to parse something like that out would be to pursue neuropsychological evaluations where they do in-depth cognitive testing, which can then help us understand, well, where is the cognitive disability occurring, and that could help us parse out what's MS cognition, or disability from MS, versus is there another process going on.

Okay. Moving on to roles of comorbidities in multiple sclerosis. So as I already mentioned, unfortunately having multiple sclerosis does not provide protection from other disease, such as strokes, cancer, heart disease and diabetes. And unfortunately the more comorbidities an individual has, the higher the risk for disability with MS. Somehow, and there's been multiple studies that show this, that the more comorbidities an individual has, the more accelerated the disability progression we see. And that kind of makes sense. Right? With multiple sclerosis we really rely on that central nervous system being able to compensate for kind of the kicks and knocks the MS kind of brought on. And if somebody has other medical issues that are putting a stress on the central nervous system, we can almost expect that the brain and the spine, what makes up the central nervous system, can compensate as well, because now it's not just fighting against one process, it also has to kind of overcompensate for other processes. And one thing I want to remind you of is that the most common MS-unrelated causes of death in patients with MS are the things that get most of the patients that don't have MS, which is cancer, cardiovascular disease and respiratory disease. And that happens to be the most likely thing that a patient with MS would pass away from. The type of things that most patients will kind of encounter as they get older as well.

So, you know, touching upon the comorbidities and multiple sclerosis, one comorbidity that I wanted to kind of pay close attention to is depression and anxiety, because it still to this day happens to be the most common comorbidity seen in MS. And as this graph shows, unlike hypertension, hyperlipidemia, heart disease and diabetes, those are the things, those are the comorbidities that go up as you get older. So over 60, we see the hypertension, kind of, bar go up, depression and anxiety stay high no matter how old you are. And so, you know, that's something, unfortunately, that many people will deal with throughout their entire MS life span.

And unfortunately, depression and anxiety are associated with reduced health related quality of life in MS. And it's even more so than the physical comorbidities. So that's one of these comorbidities in MS that many people will have across the entire life span and is something that can be treated and needs to be addressed across the life span.

And then I want to kind of switch gears a little bit and talk about vascular co-morbidities and MS. So what are vascular comorbidities? What do I mean? That's your hypertension, diabetes, ischemic heart disease, peripheral vascular disease. The vascular comorbidities increase the risk of ambulatory disability by one and a half. That's a big amount. So if somebody who is diagnosed with MS that has a vascular comorbidity, their likelihood of having, or their time to having difficulty walking is about six years younger than one compared to patients who are diagnosed with MS without those vascular comorbidities. We also see that vascular comorbidities are associated with gray matter and cortical volume decreases and increased lesion burden. So what does that mean? So, patients that have vascular comorbidities may have more lesions on their brain and we may also see brain shrinkage occur at an accelerated rate. We also see worsening disability in patients who have higher cholesterol levels, the bad cholesterol, and we see lower levels of acute neuro-inflammatory activity or less inflammation in the brain when patients have higher HDL, which is that good cholesterol that everybody's kind of looking for. So there is really a direct correlation between MS getting worse and vascular comorbidities like hypertension and diabetes and high cholesterol, all risk factors that can really be modified and need to be addressed as patients get older.

So that's kind of the bad news. But this is also good news, right? Because as a population, we have really been able to identify positive health behaviors that can reduce these comorbidities or can reduce the risk of these comorbidities. And by doing these positive health behaviors, you can really make a difference in how you're aging with your MS. So simple things that we all know are good for our general health is quitting smoking, improving your diet, and what I mean by that is, you know, avoiding processed foods, eating more green vegetables and fresh fruit, exercising. So nothing that's kind of out of the ordinary or something that you haven't heard before. But all of these things really make MS outcomes better and makes aging with MS better.

And then we also have to be very proactive about managing our comorbidities. And that starts with a routine. Make sure you have a primary care doctor that's looking at your lipid levels, right? Making sure that your LDL is not too elevated, and if it is, then, potentially, a lipid lowering drug would be the right option for you, making sure you've had diabetes check, you have your blood pressure checked on a regular basis. And then we really want to encourage everyone to have age appropriate cancer screening. Sometimes having one chronic illness, you kind of... some of my patients kind of want to avoid dealing with anything else, right? They feel like they have their plate full with this one illness. But again, having MS does not prevent you from having other disease processes. And it is those disease processes that become even more kind of important and may cause increased risk in somebody's life as an individual gets older. So we really want to encourage all of our patients to do the primary care evaluations and making sure that simple things like high blood pressure, high cholesterol and cancer screening are done and is monitored.

Okay. So switching gears yet again, I wanted to touch upon the role of medications in aging MS population. Again, a new topic because for many years we've been very gung ho about getting everybody on medications. We have these fantastic medications and we know that these medications make a difference, but they make a difference in patients with inflammatory disease activity. And we have not been very successful in identifying medications that help with disease progression outside of inflammation. So one thing that we have realized as we've been kind of

watching MS patients for many, many years and having these fantastic natural history studies of MS patients is that inflammation, inflammatory disease activity decreases as patients get older. The immune system quiets down. So, one example I can give you of that is, you know, is potentially as somebody gets older, over 60, for example, we as a medical community, we're recommending vaccinations for pneumonia, for shingles. And that's because at this point, you know, at this point, we do see the immune system quieting down. And we need a boost via vaccines to help fight these infections. And similar kind of processes happen with MS. There is less of that inflammatory activity. And again, many of our medications are much more inclined to be useful in shutting down that inflammation.

And so that has to be part of a conversation as we're discussing MS therapies in patients who are older. And one thing that I wanted everybody to understand is that, unfortunately, all of the clinical trials, and clinical trials is the way that we understand a medication works or doesn't work, right?

That's how all of these therapies have come onto the market. And that's what we stand by to say, look, these drugs really work. However, the drug... the clinical trials have very specific inclusion/exclusion criteria. And there were no clinical trials that allowed patients to be part of these clinical trials over the age of 55. And that's really unfortunate, right? Because we really have no idea whether these medications work in individuals over the age of 55. And we don't understand the risk/benefit analysis. Every drug has its risk factors. But we don't know, and I may assume, I don't know for sure, but one can theorize that potentially the risk of a medication may be increased for an individual who is older, where their drug metabolism has slowed down or the immune system is not as strong. And yet we really just don't have any data. We don't know if it's effective and we don't know what the risks really are for patients over the age of 55, which I would even say is when I think about aging, you know, saying 55 is kind of the cutoff, really doesn't sit well with me. But that's unfortunately the reality.

And so, there has been retrospective studies where people kind of look back at the data and say, well, what does that look like, since there is no kind of good clinical trials to give us information one way or another. And then what at least one study showed and a few others, is that the drugs were really not very useful in reducing disease progression after the age of 53, where they really did not see any treatment with therapeutic response after the age of 53. And then the high efficacy drugs were only superior to the low efficacy drugs in patients below 40. However, regardless of age, when there is inflammation, and when I speak to inflammation, it's when patients have ongoing clinical attacks or there's new lesions on MRI, that speaks to the fact that there is inflammation and these medications are effective. So as we all know, MS has a huge spectrum of disease, and everybody's so different and there are certainly patients who are being diagnosed with relapses at the age of 60, I have seen it, even at 70. And for those patients, these disease modifying therapies are probably appropriate. However, and now there is a study to speak to that, which I will move on to the next slide to show you, in patients who have been stable for many years on medications, there is potentially a role for stopping the disease modifying therapies.

So let's get to that. So given all of these kind of issues that I've already discussed with you, there was a national... there was a trial. It was called the DISCOMS trial, and it was a randomized controlled trial that was run and supported by NIH type of grants. And it looked at patients who were over the age of 55 who had no inflammatory disease activity for five years, meaning that they had stable MRIs for five years, no clinical attacks. And as far as the doctor could see, there was no changes in their exam. And what they did was they stopped the medication. Half of the patients stopped their medications and the other half continued the

medications. And this was decided randomly. And in the end of the trial, they did not see a clinical difference between patients who stopped medications versus patients who continued the medication.

However, I wanted you to make sure that you hear that it is patients who have been very stable for at least five years who are being taken off these drugs. However, another kind of thing to consider is that patients who are on natalizumab or fingolimod, or Gilenya, those patients stopping the medication, there may be an increased risk for disease, kind of, rebound. And so we are very careful, and that can occur even in patients who have been stable for many, many years. And so, patients on those disease modifying therapies have to be extra careful and discuss the pros and cons of continuing versus staying on medication even more carefully with their doctor.

Okay. So I'm going to move on from here to talk about healthy aging model and factors most greatly contributing to healthy aging. So again, relatively new concept, but the doctors and, kind of, social workers and psychologists thinking about healthy aging with MS really kind of came up with this type of model and it's called Selective Optimization with Compensation Model. And what this model suggests is that model of healthy aging that is focusing on strength rather than deficits suggests that older people can select and optimize their best abilities and most intact functions while compensating for declines and losses. And that suggests that successful aging may coexist with diseases and functional limitations if compensatory psychological and/or social mechanisms are employed. So, basically, it just says that, one, despite having a chronic illness or disability, one can still age successfully. (Sorry, jumping.)

So with that they felt that the critical factors for MS patients to age well as such, they thought that work would be important, social engagements, effective and accessible health care, healthy lifestyle habits and maintaining independence at home, with the supporting factors of financial flexibility, social support, cognitive and mental health, and resilience. However, they then went on to look at older MS patients, and they interviewed 683 older MS individuals. And here in table 1 you can see that the age range was from 55 to 75 plus.

So they really looked at a wide age spectrum of patients getting older with MS. And they asked them... these patients have been living with MS for many years, and they, you know, they were successfully aging, meaning that they were living well and continue to function in their society. And so they asked them, what's important to you? How are you living with multiple sclerosis? And so here are, kind of, the healthy aging themes that came up, and the important ones were social connections, attitude and outlook, lifestyle choices and habits, health care systems, spirituality and religion, independence, and finances actually came on the very bottom of the list, which is interesting because the prediction of the model was that finances was going to be a key to living well, and it really wasn't. So I thought that was interesting. And furthermore, the social connections, attitude and outlook, and lifestyle choices and habits were really pretty much the most important things across the entire age span of 55 to 75.

So when they looked at attitudes and outlooks, what specific attitudes and outlooks these patients kind of exhibited, the most common one was positivity, determination and perseverance, acceptance. The patients did not dwell on MS, they had humor, hope, gratitude. And one thing that I wanted to point out is the patients who are 75 and older, one of the more important things that they identified was keeping self-identity, which I thought was very interesting. And then they all spoke to healthy lifestyle choices: healthy eating, exercising, keeping active, having hobbies. And the top five strategies identified by all the age groups was healthy eating, exercise, keeping active, adequate rest and hobbies. And guess what? Those

are the top five kind of strategies that were identified by older individuals that did not have a chronic illness. So it may be this whole aging process, with MS or without, is not so different. And then 79% of patients said that this is the big three things that help them age well with MS. And those three things were: lifestyle choices and habits, attitude and outlook on life, and social connections. I thought that was very interesting.

So moving on to my last objective, and that is to give you three steps to age exuberantly. But don't take it from me, right? I am, you know, why would you listen to somebody who is younger than you and telling you how to age successfully? As I was doing research for this talk, I came upon a book that, actually I happened to read an article about it in the New York Times, and I thought, how appropriate. And this book was written by, the author is Margareta Magnusson, who was an artist before she became an author. And she wrote a book that is entitled "The Swedish Art of Aging Exuberantly: Life Wisdom from Someone Who Will (Probably) Die Before You." So let's hear from her. She's 86 years old, and I wanted to just share some of the advice that she gives in her book with you.

So her first advice is this - embrace *kärt*. And that means dear or cherished *besvär*, or pain. And what that means is that, kind of, to lean in to your emotions and be grateful for the pain that you do have. So for an example, I would tell you this, you know, when I have to pay bills, it's painful, but I'm grateful. I am able to do that. I'm able to have the money to pay for these bills. Or if I have to take care of my sick daughter. Wow, is it, you know, a pain in the butt to, you know, to tend to her every need. But am I so grateful that I'm able to take care of her and that I have her to offer that love and attention to? Absolutely. So, you know, so cherish the pain that we're still, you know, even if something is kind of painful, we're lucky. And maybe think about the fact that we're pretty lucky to be able to do the things that we need to do.

The other advice that she gives is to surround yourself with the young. And she speaks of research to suggest that socializing with younger people who are mentally sharp can provide the type of stimulation that helps boost cognitive function. And she writes, Magnusson writes, "just ask them questions, listen to them, give them food, don't tell them about your bad knee again." So I thought that was a pretty good advice. And then finally, she writes, "Say 'yes' whenever possible... in effect, saying yes to life, being curious and exploratory, being part of a community." It's kind of like saying yes to life. And then, you know, any time you want to say no, just ask yourself, is it because I can't do it or is it because I won't.

So with that, with those wise words, I will finish and I wish everyone healthy and happy aging. Thank you.

### **Yahaira Rivera:**

Thank you, Dr. Ryerson, for such an informative presentation. Now to continue our learning and conversation we'd like to take some of the questions from the audience. We have lots of questions that are specific to tonight's topic, especially about symptoms, fatigue, weakness, brain fog, you name it. Is it my MS or is it aging? How can I differentiate between MS related symptoms and age related symptoms?

### **Dr. Lana Ryerson:**

I think that's an excellent question. And I would say as a physician hearing something like that, I'm not sure it makes a difference. Right? Because in reality, the way we approach MS symptoms is that we just treat the symptom that we're faced with. So, for example, if somebody has nerve pain, I will treat that nerve pain, whether it's related to MS or if it's related to a disc herniation, for example, in a similar way, I will give you a medication to help with nerve pain.

And this is a similar kind of example in that, you know, I'm not really sure if it matters, if it's because of aging that you have brain fog or because it's MS. I would say brain fog is probably treated the same in both, from both ideologies, of sorts. And you know, the best things I would usually recommend is kind of looking at positive behavioral health changes, like exercise, looking at diet, looking at supplements potentially, and things like that.

**Yahaira Rivera:**

Thank you. Does the progression of MS slow down or stop as we age?

**Dr. Lana Ryerson:**

I think that's a case by case basis. So again, I can speak to the inflammatory disease activity in that that, in general, patients will have less inflammation, meaning that the risk of a clinical attack or the risk of new lesions on MRI, will decrease as somebody gets older. Again, in general. But the disease progression is different for everyone. In some patients they will remain stable. And that, you know, I always say that we're all kind of getting worse as we get older. That's normal process of aging. And I always say, I hope that we can kind of stay that course of normal aging or stay as close to that course as possible, but nobody really understands what that slope looks like. But the disease progression and that rate is different for everyone.

**Yahaira Rivera:**

Thank you. How does the aging immune system impact my MS?

**Dr. Lana Ryerson:**

So again, it speaks to the idea that patients, as they get older with an immune system that's quieting down, we expect to see less inflammatory disease activity, meaning that we have less clinical relapses and less chances for new, or less expectation for new lesions on a MRI.

**Yahaira Rivera:**

Okay. What is the relationship, if there is a relationship, between MS and osteoporosis?

**Dr. Lana Ryerson:**

I don't know if there is. I'm not sure I could say that there has been a pathophysiological mechanism that has been linked between MS and osteoporosis. Having said that, osteoporosis is very common in patients with MS for a few reasons. One is because MS patients are often exposed to high doses of steroids during clinical attacks, and steroids do increase the risk of osteoporosis. Secondly, if a patient with MS is disabled, they may have less opportunities to be mobile, which increases the risk of osteoporosis. And as we all know, osteoporosis happens to be more common in postmenopausal women, MS being a female predominant disease, or certainly seen more commonly in women. So again, osteoporosis has this is something that we encounter very frequently in MS patients.

**Yahaira Rivera:**

Thank you. Do you have any advice or recommendations for someone who's struggling with severe spasticity, tremors or balance issues?

**Dr. Lana Ryerson:**

These are kind of... these are very common symptoms, unfortunately. In general, I am a big proponent of physical therapy and exercise, physical therapy for stretching, which helps with spasticity. Physical therapy is not just the idea of, you know, strengthening your muscles, they also work on stretching and balance exercises. So those are the type of things that would be



very important. Occupational Therapy can help manage patient's tremors or give ideas about how to kind of go through activities of daily living with a tremor. So I would definitely point those individuals to that kind of approach.

**Yahaira Rivera:**

Wonderful. Thank you. Dr. Ryerson, lots of the questions are specific to DMTs. Is there an age to stop taking MS medicine or discontinue DMTs?

**Dr. Lana Ryerson:**

So I think that is a very patient dependent discussion. Every MS... you know, I always said that one of the reasons I love being an MS doctor is because every patient has their own story with MS, there's never one medication that works for all the patients. And so, the, kind of, physician-patient relationship, developing that relationship and identifying the right medication for the right individual is so important. The same goes with discontinuation. It's never the... one answer will never suffice for the entire aging MS patient population. I can, you know, I presented some of the data that we have available, but it is a personalized decision, one that you make with your neurologist.

**Yahaira Rivera:**

Great advice. Thank you so much. If a person is diagnosed later in life, is there any difference in how they should approach managing their MS?

**Dr. Lana Ryerson:**

So the data... there is specific data on patients who are diagnosed later in life, and unfortunately, those patients, in general, those patients may be at higher risk for disability, and therefore, we may want to treat those patients more aggressively as opposed to somebody who was diagnosed with MS much younger, earlier in their life, and then we are seeing them at a later age.

**Yahaira Rivera:**

Okay. Thank you. If someone is over 55 years old and has been stable for over five years, what will be the course of action to eventually get them off DMTs?

**Dr. Lana Ryerson:**

So in my practice, if I see somebody who's been very stable for over five years, and usually it's much longer than that, and they're interested in stopping their medication, I always want to make sure that there is an MRI, a recent MRI, that confirms their stability. And again, a very clear understanding of what their exam looks like, and serial exams to assure myself that they are truly stable. And if that's the case, then I do stop the medication and monitor that individual closely. So in my clinic that means getting an MRI every six months for at least two years and doing serial exams in my office, every 3 to 6 months. Again, just monitoring and watching to make sure that the patient remains as stable as when they were on medication.

**Yahaira Rivera:**

Thank you. So now talking about mental health and self care, we received questions regarding vitamins and supplements. Do you have suggestions for that?

**Dr. Lana Ryerson:**

The specific... There's no kind of specific vitamin or mineral that we recommend. Vitamin D has been identified as a vitamin that may potentially be important in MS pathology. And so we always look to have that at its goal, which is usually 50 to 75 range. So that's something that should be monitored. And then, otherwise, I look to make sure that patients have normal iron levels, that they're not anemic, that their B12 is normal and supplement accordingly.

**Yahaira Rivera:**

Thank you. Is MS making us age faster or just getting older symptoms earlier?

**Dr. Lana Ryerson:**

It's a good question. I think there is this phenomenon that we sometimes see in MS patients in the sense that patients age quicker with multiple sclerosis. And it's hard to, you know, as we get older, patients without MS, patients will lose brain volume, patients will develop more difficulty with ambulation, and so forth. Because of, kind of, the ongoing attack on the central nervous system, I do sometimes feel that this aging process happens faster for MS patients. And again, everybody's very different and everybody's story with their multiple sclerosis is different. So, hard to generalize, but I also don't disagree with that statement.

**Yahaira Rivera:**

Thank you. Will MS cause memory loss or dementia?

**Dr. Lana Ryerson:**

So as I mentioned in the presentation, you know, there's an estimation of up to 70% of people with MS have some sort of cognitive deficits. It is very prevalent. And so, it's common. And, the more we look, meaning, you know, if we do neuropsychological testing on all of our MS patients, I'm sure that we would find that to be even higher than that stated 70%. Dementia just speaks to a process where patients have loss of cognitive, multiple cognitive domains, and what causes that dementia could be of various reasons. And so what I've spoken to is the fact that as you get older, it may be hard for one to understand where the cognitive deficits are coming from. Is it MS or could it be another neurodegenerative disease process, for example, like Alzheimer's? And again, unfortunately, having MS does not prevent another disease process from kind of setting in.

**Yahaira Rivera:**

We receive a comment about clinical trials. Do you think that there's hope for clinical trials to be more inclusive and actually let people living with MS who are also aging and are seniors to participate?

**Dr. Lana Ryerson:**

I am hopeful and it is something that myself and other neurologists and leaders in the field are speaking to the FDA, to the pharmaceutical companies. It is really a dire need in our community.

**Yahaira Rivera:**

Thank you. Our next question: "I'm 58 years old. I have been told that it's possible that I may be going into secondary-progressive. Is this considered not stable when considering stopping therapy?"

**Dr. Lana Ryerson:**

Secondary-progressive stage speaks to disease progression and it speaks to the fact that there is no further relapses. But somebody may continue to have decline in neurological functioning. There is a distinction between active secondary progressive, meaning that the patient may still have attacks or have new lesions on the MRI, versus somebody that may have secondary progressive MS, but not be active. And so, there is that distinction, if somebody has active secondary progressive MS, there's definitely indication for ongoing disease modifying therapy.

**Yahaira Rivera:**

Thank you. And something else that you mentioned is diet and exercise. Do you have suggestions for a proper diet or exercise regimens for worsening MS?

**Dr. Lana Ryerson:**

There's never been a specific diet that has been approved for multiple... that has been shown to improve MS. And there's been really excellent clinical, kind of, trials looking at that. But what has been definitely shown is that being of normal weight is certainly... or, maybe kind of flipping it around - obesity can increase the risk of disability. I would say that there is not a specific diet for MS, but there are diets that have been certainly identified to foster positive behavior and are generally good diets for patients to follow. And those are the Mediterranean diet, that's the specific one that we often encourage our patients to try.

But, even, I actually am not a fan of specific diets at all. I want patients to learn to eat healthy, and that means cutting away the processed foods and eating veggies and fruits and things that don't come in boxes. So everybody's different. You know, people often ask me about staying away from dairy, staying away from gluten, and everybody's different. People have sensitivities to various things. And I would say if that's a question for you, then try to exclude that for a month and see how you feel. But again, everybody's different and there is no overwhelming kind of statement that patients with MS should not have gluten or should not have dairy. I think that that's, you know, that has not been proven. And exercise, exercise is different for everyone else. For some patients, it means, you know, running a few miles and other people, it's doing chair yoga. But movement is so important. I often used a line that "if you're not using it, you're losing it." So, you know, it's going out there and giving yourself a chance to move for five, ten, twenty minutes. Again, everybody's different. But, think about where you are, talk to your doctor about the type of exercises that would be right for you. But it is very important to do that and kind of put that into your daily routine.

**Yahaira Rivera:**

Thank you. I love the line that you mentioned before, "Every patient has a story," so, not all the answers will apply to their specific situation and it's important for them to have that communication with the provider. Dr. Ryerson, so a topic that is important to mention is about senior living retirement. Do you have any advice for the audience about what comes next, what to anticipate, any information about long term care?

**Dr. Lana Ryerson:**

Again, such an individualized question. I think that it's important to be realistic about where an individual is. You know, one of the most important things that we talk about in our clinics is fall prevention. Falls can really set people back. And so patients have to be honest with themselves and look for ways to reduce that risk as much as possible. And what does that look like for every patient? That's impossible to say. Does every MS patient need to worry about finding a... living on one floor, or need to think about assisted living? I don't think that's true, but I think as we all

get older, we all have to be proactively thinking about our limitations and making sure that we're making the right choices for that.

**Yahaira Rivera:**

And we have a couple of minutes left, we have one more question. It sounds like there's some evidence that we can stop DMTs as we age, but is there a downside to staying on them?

**Dr. Lana Ryerson:**

I think that's an excellent question. I think as you get older, the risk of various medications can go up. Again, the drug metabolism slows down, the immune system can slow down. So again, the risk factors for infections or toxicities to medications can increase. Also, one phenomenon that often happens as patients get older is that there are more comorbidities, more diseases to treat, there's more medications that are added. And the combination of those medications may be an issue. And we have, kind of, a name for that, and that's called polypharmacy. And that is, you know, is an issue for patients who are getting older and thinking of all of these combinations of medications. But again, very individualized decisions that have to be made. And, you know, as I said, there is suggestion that, there is a clinical trial that showed a suggestion that some patients can come off medications, but it's a personalized decision between you and the doctor.

**Yahaira Rivera:**

Thank you, Dr. Ryerson, for taking the time to provide us with answers. This concludes our webcast. Tonight's webinar was recorded and will be made available on our website in the upcoming weeks. Please visit our website to learn more about MSAA's resources and upcoming events. On behalf of MSAA, thank you once again, Dr. Ryerson, for your time and for providing insightful information about healthy aging with multiple sclerosis.

To our wonderful audience, Thank you for participating and thank you for your wonderful questions. We hope that this program has provided information and advice that you can go back and apply to your life as you embark on your healthy aging with MS journey. Please take a couple of minutes to fill out the survey that will appear on your screen. And please know that we're always thinking of the entire MS community. Take care, stay safe, and have a wonderful night. Bye everyone.