# Episode 6 - Prof. Solomon Tesfaye - The Whole Patient Addressing Quality of Life and Complications

Speaker 1

Welcome to the final episode of Inside the Silent Storm. I'm Dr. Lim. And as we conclude our journey through the complex world of diabetic peripheral neuropathy, today we are focusing on the whole patient, not just managing pain, but optimizing quality of life and preventing complications. Throughout this series, we're explored diabetic peripheral neuropathy from multiple angles, its global impact, underlying mechanisms, the nature of neuropathic pain, patient experiences, and treatment options.

Speaker 1

Today, we bring it all together by discussing how to provide comprehensive, patient centered care that addresses not just symptoms, but the person living with those symptoms. Diabetic peripheral neuropathy affects more than sensation in the feet. It impacts mobility, independence, mental health, relationships, and overall life satisfaction. Moreover, the loss of protective sensation puts patients at risk for serious complications that can be limb-threatening as well as life-threatening.

Speaker 1

Joining me for this final discussion is Professor Solomon Tesfaye. He's a consultant Diabetologist at Sheffield Teaching Hospitals and Honorary Professor at the University of Sheffield, UK, where he also serves as Research Director for Diabetes and Endocrinology. He is a visiting professor at Shanghai Jiao Tong University, Shanghai, China, an expert in comprehensive diabetes care and complication prevention. We will explore how to optimize outcomes for the whole patient living with peripheral neuropathy.

Speaker 1

Professor, thank you for helping us conclude this series with the focus on comprehensive, patient centered care. It's really great to have you today. And, Professor Tesfaye, could you please enlighten us about some of the key insights about the importance of recognizing diabetic peripheral neuropathy early?

Speaker 2

And thank you very much, Professor Lim. I think this is a really important. When we make a diagnosis of DPN or diabetic peripheral neuropathy in our One Stop Shop, for instance, we need to check the condition early. So if you use the monofilament you diagnose peripheral neuropathy in only 14%. These are unselected patients coming to the clinic. The one stop clinic.

Speaker 2

If you use electrophysiology you diagnose a condition in around 50%. So you're diagnosing it early and some people will have. So we get three groups of people. People that are absolutely normal. Which case you can say goodbye to them. We'll see you in two years time. Their control is often excellent. You're doing very well. The are slim. They don't have issues that, you know, the, A1c, blood pressure, everything is perfect in these patients.

Speaker 2

And these patients are doing very well. There's no need to review them every six months, you know, because they're doing very well. They already they're exercising. They're have a very healthy lifestyle. And then you have the ones that are poor control but have early peripheral neuropathy. These patients, we channel them to a nurse led clinic. We inform them they have got a problem.

Speaker 2

They have got early diabetic peripheral neuropathy and they get shocked. Many of them, they do not know why is it important. Why do we need to diagnose the condition? Because it makes them alter their lifestyle. It's a good way, you know, if you if I show you a Sudoscan test or a, for instance, a, a DPN check test, and these abnormal people get worried naturally.

Speaker 2

What's not. So I need to change my lifestyle. It's a good way of initiating them. So we channel these group of people. They don't have symptoms. They are walking all right. They don't have any problems. These patients, we channel them to an intensive improvement in their metabolic parameters. How do we do that? We it is a nurse led clinic.

Speaker 2

They don't need to see a doctor. If there is complexity of managing these patients, they can go to see the doctor. But nurses are quite capable. We've got DSNs in the UK, we call them Diabetes Specialist Nurses. They are very well trained. They're band six and seven, so they are very experienced nurse. You know how to adjust. They can remotely advise the patient because they look at their FreeStyle Libre.

Speaker 2

They readings, and they are very well trained and they can manage the glucose control. They can start medications. You can prescribe SGLT2 inhibitors, they can prescribes GLP1 analogs. So they are, really very good. So within a few weeks they can normalize the A1c particularly now with Type 2 diabetes. We can manage we can improve everything.

Speaker 2

There are fewer about 10% of difficult to control. And many of them have mental health issues. Or they're not adhering or they have a lifestyle which doesn't suit. They have working all the time. They're not putting in effort into their diabetes care. There are these very difficult. With the vast majority, we can normalize. So these are patients with sort of early onset neuropathy lifestyle modification big time.

Speaker 2

They stop smoking. They have to lose weight. They we they have to go into an exercise program. We can give them some time Digital aids. They can take with them a watch which monitors their activity. We can monitor their activity. We can also get them to, join an exercise, program group. We can give them lifestyle advice if they're taking the car to their, workplace.

Speaker 2

We ask them to stop to park the car about two miles before they reach work, and then walk the rest and come back and pick up the car. And there are many methods we use so that people that are particularly extremely busy, can modify their lifestyle. We give them body scanners, that give you your percentage of fat in your body when you stand on it.

Speaker 2

And that's also modifying it modifies their behavior because, you know, I've got I've got to do that little bit more to lose weight. And there are and finally, we everybody is fitted with FreeStyle Libre even patients with type 2 diabetes. So when they eat a little bit of, you know, sugary food or carbohydrate, they can see the spike on their Libre.

Speaker 2

And again, that modifies these people. We advocate these very much to the to the in fact, I'm going to be attending Parliament on Tuesday. I'm going to be meeting them. MPs, Ministers in the UK. This is what we need to do in primary care, not when they come to a hospital after they've got complications. And this is the approach for people that have early onset peripheral neuropathy.

Speaker 2

And then you'll find people that are monofilament positive already, approximately around, a 1/3rd of patients will have that. Sadly, they already got established peripheral neuropathy. These patients have a different kind of approach. And because some of these, particularly the extreme ends, will have foot ulcers, they may have unsteadiness and falls and the, they will be, troubled very often.

Speaker 2

They have painful neuropathy also, which limits their mobility. They have proper peripheral neuropathy. Again here there is a big, spectrum of patients. And at the extreme end they are extremely disabled. But there are so all of these group of people with established peripheral neuropathy go under the foot protection team at the Foot Protection Team is a community based team in the UK.

Speaker 2

And that means they are under a podiatrist. So they attend two monthly, podiatry sessions. So the nails, cutting, calluses removed, their feet are checked every couple of months, which is fantastic. I think, because even at that stage. You can be if you have particularly severe neuropathy, you need to have appropriate footwear, because if you have inappropriate footwear, which is a commonest form of trauma to the neuropathic foot, and if you have foot deformity and if you have neuropathy, if you have the triad, you're going to develop foot ulcer.

Speaker 2

So it can stop people developing foot ulcer by having specially fitted shoes that accommodate the feet, but educating the patients to look after their feet, not to walk barefoot, to check water before advise them when traveling abroad, be careful, their feet. Their advice we give for people who have lost loss of protective sensation. We call it when you have the loss of protective sensation, you need special education.

Speaker 2

So these are the things that we apply for people that have the at-risk diabetic foot. Once the patient has a foot ulcer or attending foot clinic, then they have a set of other people that look after these patients. These are the vascular surgeon is involved. Orthopedic surgeon is involved. The microbiologist is involved, a radiologist is involved. We have a big team of people.

Speaker 2

So when the patient comes with a foot problem and they have a foot ulcer, at that point they are seen. If we cannot feel the pulse, a vascular surgeon sees them. On the same day. Otherwise a delay particularly it's a vascular ulcer and you sending a referral letter to a vascular surgeon in 4 or 5 weeks time, the patient could lose a leg.

Speaker 2

So we have an MDT clinic which is attended by the vascular surgeon, said seeing their own patients. But when we have a patient that they need to see, we bring them and they can see. So so it's it's tailoring treatment to the individual patient with different levels of peripheral neuropathy. What is the final solution. So there are some people who have very severe sensory ataxia.

Speaker 2

And there is some really interesting data coming from they from Switzerland published in Nature Communication. You've seen the paper where, actually when you walk, there are special insoles that the patient wears which send, signals to a systems controller, which the patient has and which then advises the patient when they should put their foot next and improves their gait and their mobility.

Speaker 2

And so this is still at an experimental stage, but the future is really good because, strengthening the muscles, the use of physiotherapy, assistive devices are very important. I've had a lot of elderly patients who were having lots of falls by strengthening their, leg muscles by getting them to walk long periods. Actually, the stability is improved.

Speaker 2

So it's about having tailoring the degree of peripheral neuropathy. And I'm talking about painless neuropathy at this stage. To in order to enhance the future prospects of the disease, but also improve the quality of life and prevent further complications.

Speaker 1

So it seems that you have three level approach, professor, test for the first level. It would be early early detection because this group of people were looking into reversibility of diabetic peripheral neuropathy. We have a control of multiple risk factors.

Speaker 2

Yes.

Speaker 1

And the level two is detection of high risk foot. You may go into diabetic foot ulcer who may go into combination with an ischemia causing amputation. And this we can do early corrective surgery foot protection etc.. And the level three is really the late stage of disease that we we might have missed at the early course of disease.

Speaker 1

And they come in to us, we are needing **MDT** and and of course we want to prevent recurrent events. Yes. Okay.

Speaker 2

Perfect. If some. These are beautifully Professor Lim.

Speaker 1

Thank you very much. Professor, at this, I mean, we really hope that your concept of having this one-stop shop integrated comprehensive care for people living with diabetes to prevent diabetic peripheral neuropathy, as well as other complications would be, into fruition, worldwide, in the near future.

Speaker 2

Yes. I think I just want to add that it needs implementation medicine. It's all right to for us to talk about it. It's all right for us to write guidelines. This is not going to bring any meaningful change.

It needs political support. The powers that be need to invest money into this, and it needs to be. Then you need to bring policymakers in.

Speaker 2

In the UK we have NHS England, which is very important policy makers. These are people who actually then decide, look at at a locality level, what kind of institution, what kind of, infrastructure is required to deliver this. And then on top of that, you need people that are experts in implementation medicine. How look at the barriers.

Speaker 2

Why don't patients come for these? How do we encourage patients to come to this? How do where do we should be building these things. All these needs an integrated approach and something that is going to have a huge high, attendance or uptake. And what we've done in the UK is we've aligned all these to Eye screening because people come for Eye screening.

Speaker 2

It's a the excellent opportunity then for us to attack them. I don't mean attack them physically, but just put them next door and do all the other tests when they come using that advantage. Because people attend for Eye screening in the UK, not in Malaysia, it could be different, could be different approach. Maybe when they come to the mosque or maybe in a mall, you know, people are doing their shopping and can have a booth for one stop shop or something like that during their break after having done shopping or something like that.

Speaker 2

We need to come with very creative methodology. People are busy, so young people with type 1 diabetes, for instance, we have out of work one stop shop. So that means in the evening we

provide that when they come we because during daytime they are going to university so we can. Saturday sometimes be so busy during weekdays they don't attend.

Speaker 2

So we need to offer the patient choices. Many years ago we used to have small shops, didn't we? And then became supermarkets. Now the supermarkets are open 24 hours a day. We are catering to demand and I think that we need to, apply this to our localities. You don't need a lot of money. It's a way of organizing the care.

Speaker 2

If you don't have these point of care devices that are expensive, use simple things like tuning fork, but make sure that all your patients are have the basic screening done, which shouldn't be too expensive. Do not try to do these in your clinics. You cannot screen 20 patients in your in a three hour clinic. It's impossible because you have to treat them.

Speaker 2

You have to. It's got to be divorced from the normal clinic. It's got to be separate. And the data then comes to the doctor, and the doctor can then see 10-20 patients because they have all their data, which has been done by cheaper healthcare professionals who don't cost a lot but provide you the data. And the doctor makes a decision how to manage the hypertension, how to manage the weight loss, etc. with that ten minutes or 6-10 minutes they have.

Speaker 2

They use that for that, not to try and take shoes and socks off and diagnose neuropathy and do those things. So it's about organization of care, and I hope this podcast will give you a little bit of

encouragement, perhaps, to think about these and we started this one stop approach, in John Weston General Hospital in, in Manila, for instance.

Speaker 2

So you don't need to have a high resource place. So pilot this work, see what works for you and, and hopefully, you can do a good job for your patients.

Speaker 1

I really echo your sentiment, Prof. Tesfaye. And we always tell, though, a patient saying that diabetes is not a single person's disease, diabetes, the whole family conditions so similarly, management of diabetes and the associated complications like deep diabetic peripheral neuropathy is not just, an individual level approach. It's not just between the doctor and patients, but we really need to rope in is a multi-stakeholder engagement to trying to improve the overall care and quality of life of our patients.

Speaker 2

Thank you very much.

Speaker 1

Thank you, Professor Tesfaye. As we conclude this series, I am struck by how this final episode summarizes the central theme of our entire journey. Diabetic peripheral neuropathy is not just a medical condition to be diagnosed and treated. It is a life experience that requires comprehensive, compassionate care. From a first episode exploring the global challenge of diabetic peripheral neuropathy to today's discussion about comprehensive patient care, we have seen how this condition touches every aspect of human experience.

Speaker 1

We have learned about cellular mechanisms and cutting-edge treatment, but we also heard the voices of patients reminding us why this word matters. The message I hope our listeners take away from this entire series is multifaceted. For patients and families, you are not alone in this journey. Diabetic peripheral neuropathy is a serious condition, but with proper care, early detection, and comprehensive management, is it possible to maintain quality of life and prevent serious complications?

Speaker 1

Advocate for yourself. Six specialized care when needed and never dismiss symptoms at just part of having diabetes. For health care providers Diabetic peripheral neuropathy requires our attention at every stage of diabetes care. You must screen regularly, diagnose accurately, treat comprehensively, and never forget that behind every case of neuropathy is a person with hopes, fears, and dreams for the future.

Speaker 1

For researchers and policymakers, the global burden of diabetic peripheral neuropathy demands continued investment in research, improve access to care, and innovative approaches to prevention and treatment. As we conclude inside the Silent Storm, I want to thank all of our expert guests who shared their knowledge and passion for improving care for people living with diabetic peripheral neuropathy. Most importantly, I want to thank these patients whose stories remind us why this work is so vital.

Speaker 1

Diabetic peripheral neuropathy may be called a silent storm, but through education, advocacy, and comprehensive care, we can give voice to this condition and hope to those it affects. Thank

you for joining us on this journey. And remember in the fight against diabetic peripheral neuropathy. Knowledge truly is power. Until next time, take care of yourself and each other.