DIABESITY DIALOGUE 1
BENEFITS ASSOCIATED WITH EARLY TREATMENT INITIATION AND INTENSIFICATION

Robert Kushner MD: Welcome to Diabesity Dialogs. I'm Dr. Bob Kushner. I'm a Professor of Medicine, Medical Education at Northwestern University, Feinberg School of Medicine in Chicago. I am joined by my friend and esteemed colleague, Jamy Ard. Jamy, you want to introduce yourself formally?

Jamy Ard, MD: Yes, so I am the esteemed colleague of Dr. Kushner, and I am a professor here at Wake Forest School of Medicine in Epidemiology and Prevention. Glad to be with you Bob.

Dr. Kushner: Me too, Jamy. I've been looking forward to this.
You know, over the course of four episodes, Jamy and I will have an open an honest discussion about Type 2 diabetes and obesity, dive deep into the latest clinical data, especially the highly talked about GLP-1 receptor agonists and the GIP/GLP dual agonist treatments that are gaining a lot of media attention for Type 2 diabetes and obesity. We believe in the importance of hearing patient voices, and we'll discuss how we can ensure that their needs are met. This is Episode 1 of our series, and we are excited to have you here with us.

Jamy, let me toss to you. Who do you think patients interact with the most with their treatment of Type 2 diabetes? Multiple choice question. Endocrinologists, diabetologists, or primary care professionals?

Dr. Ard: Oh, it's by far primary care professionals. That's the frontline.

Dr. Kushner: All right, and why is that?

Dr. Ard: That's the frontline. A lot of diagnosis happens there, and given the numbers of individuals with diabetes, if they all went to endocrinologists or diabetologists, the system would be overwhelmed. So, yeah, primary care is really important in terms of taking care of Type 2 diabetes.

Dr. Kushner: Yep, I agree. There on the frontline, as you said, that is who most patients will go see. Whether they need to be referred off, beyond it or not, will be the decision of the primary care professional.
So, let's talk about that. Let's say we have a patient coming in for a standard appointment. What they're describing is classical symptoms of Type 2 diabetes, and you begin checking or ordering labs for diagnosis. Now in this interim between symptoms to diagnosis, how do you explain what you are looking for to patients? What does that initial education look like, and how does it come to play?

Dr. Ard: Well, I think the first thing that I want to do is really understand what the patient already understands or knows about diabetes because it's often a good jumping off point to deal with either that sort of history that they have or maybe even misinformation that they have about the disease and start from there in terms of trying to help them understand well what is it that we mean by diabetes? What is it that we're actually diagnosing? What are the blood tests that we're looking at? And why is this important to actually take care of? But I also want to talk about what their short-term risk are and the longer-term risk and why it's so important to really deal with this disease in a way that helps them minimize the impact of that on their longevity, especially from an organ protection standpoint and a heart disease standpoint.

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Dr. Kushner: That sounds like a lot to cover in a short period of time, but I think you've really covered the comprehensive educational care in what we want to talk about.
Now, you know, one unique aspect of our show – Jamy, I think you know this – is that we don't just interview patients. We bring patient voices from where they often find community, which is social media. So let's take a look at Damion's reflection of his initial diagnosis.

__PATIENT PERSPECTIVE – *WHAT I WISH I WOULD HAVE KNOWN ABOUT MY T2D DIAGNOSIS*:__

Damion Thomas: Hi, my name is Damion Thomas and I'm a type two diabetic. And I was wanting to know, what are some of the things that you wish you would have known when you first got diagnosed as a type two diabetic. And I'm gonna go first. First of all, I wish someone would have told me exactly what was going on with me as far as my pain for three years, for insulin, I'm not producing enough insulin, which is not breaking down my sugar, which is causing my body to have all these strange reactions. I also wish I would know how mentally straining it was going to be to process this whole thing is, that I'm now having a disease that can possibly kill me; all the medicine that I have to take; all the different foods that I have to eat; you know, doctors appointment schedule, that would have been a big help. And I recommend people go find somebody if they are struggling with that. That leads me to the food. Not only knowing what food to eat, what foods not to eat, what food helps you, what food can actually reverse type two diabetes or put you in a state where you're back to pre-diabetic, those type of foods. Knowing all the foods not to eat as far as these different supplements, sugars, that could be more harmful to you then than the regular sugar itself. And basically medicines. What's the difference between medicine and how's that medicine going to affect other parts of me taking some sort of medicine, might cause me have kidney problems or things of that sort. So yeah, those are some of the things that I wish I have known. Please take time and let me know some of the things that you wish you would have known when you got diagnosed.

Dr. Kusner: That was great. That was, there's a lot to unpack there, Jamy. I think you'd agree with me.

Dr. Ard: Yeah.

Dr. Kushner: He, he just had a, he just covered the gamut from diagnosis to all, all the complications. What, what are, what are your initial responses to Damion's comment, his Tik Tok?

Dr. Ard: Yeah, you know, I think I get a sense of emotion around uncertainty and maybe even fear of the unknown. And he, he laid it out really actually in talking about, you know, not being able to really fully understand the gravity of the disease that could shorten his life and all the ways that that could impact his quality of life and the things that he needed to understand about his body and what was happening at that point in time and then start to prepare for how to deal with that.

So, I mean, I think it's a really, you know, what I would expect is a normal reaction. It's a shock often to people to get that diagnosis because, like I said before, a lot of people, I'm sure you see this too in your practice, Bob.

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Dr. Kushner: Yeah, I'm going to, that was actually very, very good. Very insightful. And I'm going to put my doctor hat on and kind of go on the other side of the table and how do we respond to that.
I think, Jamy, you and I, I think all doctors, our biggest fear is having patients leave our room overwhelmed or having miscommunication or didn't hear a word we said after that first diagnosis was made. So that communication, that active listening is so important for us as, as healthcare professionals.

And when I say, "Don't overwhelm," it's like meet the patient where they're at. If they don't even believe they're at risk of diabetes and don't think doing anything about it is going to make any difference in their life, you know, why are you even talking to me about it? And we start there. Versus someone that comes in who's already been in social media, reading about it. You know, they did the research on PubMed. You know, they come to us fully prepared. That's a completely different response.

I guess my thoughts are Damion presented everything that one should kind of know about diabetes and, of course, and allay those fears. But we would never as clinicians sit down for an hour and give like a whole didactic session on diabetes.

Dr. Ard: Right.

I always think about sequencing information about what do they want to know, what questions do you have, how can I help you out, what other resources do you need? But, and the bottom, you clearly want to make sure they have a feeling that they have a di-, they have a diagnosis of a potentially serious medical problem; but by taking action early and, and self-management, working with their healthcare professional, maybe getting a support group, which is one, one of the comments on his post, very, very important. You know, the people that surround them are going to support them and guide them. That's just so important in a diagnosis like diabetes.

Dr. Ard: And, and I think something that is really important and what you said about the empathic listening is the sense of assurance, right? Reassurance in telling people, like, yeah, we have a plan to help you manage this. So, in thinking about that, if you have a patient like Damion, and, and Damion's now more informed on an appropriate treatment for him, how often are you talking about, you know, managing blood sugar in an active way with glucose testing, starting to get into, you know, time in range? That's a new phrase that people are using these days. How are you starting to talk to him about those types of treatment-related issues and monitoring?

Dr. Kushner: Yeah, that, that's a good question. There is so much technology going on with continuous glucose monitoring and there's, there's reams, there's a treasure trove of information that we can get by doing continuous glucose monitoring. So just unpack some of your saying that the glycemic variability really has to do with the variation above and beyond the mean, co-, coefficient of variation; and there's guidelines, so it should be no more than 36%. So, it's kind of tight to where that mean is. And time in range has to do with the excursions of blood sugar in the course of 24 hours where time in range is between 70 and 180. It should be about 70% of the time.

You can only get that data if you're using continuous glucose monitoring, so that's kind of, that kind of boils down to who should have continuous glucose monitoring?

Dr. Ard: Right.

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Dr. Kushner: I think in the future, at least in my practice, someone with Type 2 diabetes who comes in, I'm really monitoring sug-, blood sugar mostly by blood sugar itself, either a fasting or maybe I'll do repeated sugars if they, if they want to. Certainly hemoglobin A1C every three months, which is how, how we look at that. I think that's how I'm doing it more than anything. I, I'm not putting continuous glucose monitor on my patients with Type 2 diabetes very much. Maybe someone who, who's interested in, you know, I want to know how physical activity or my diet affects my blood sugar; and that would be kind of cool. You know, you could do that for 14 days or so on, so that we call personalized medicine. That's kind of the buzzword now in medicine. So, that's kind of where I'm, I'm doing it. For most of my patients, I'm using hemoglobin A1C and may, and, and a blood sugar, perhaps monitor a little bit more if I'm really concerned. You start off with a hemoglobin of A1C of 10% or more as an example. I'm going to want to maybe watch him a little closer.

Dr. Ard: Yeah. So, let's talk about this issue of what they call the Type 2 diabetes treatment paradox, and I think we've probably all seen this. And, Bob, I'm interested to get your insights here. Let's take a look at this post...

Under control diabetes and weight gain

I recently had an A1c of 8.2% and that's the highest it's been in a long time. I really did everything I could to get my sugar under control because I am trying to have a baby in the next year. I eat healthy, bolus correctly, and exercise at a minimum 5 days a week. In this time, about 2 ish months I've gained about 4 pounds. I know this isn't a lot, but being on insulin makes it so hard for me to lose weight. Also i am starting on the closed loop system insulin pump soon which i'm afraid will make me gain more. Anyone else going through this? Any one have any tips tricks that worked for them? I feel punished for managing my diabetes correctly.

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You know, where a patient says they had an A1C of 8.2%; and that's the highest it's been in a while. Really tried everything to sort of get things under tight control, and they started eating healthier, trying to be more physically active, really doubling down on making sure that they're taking their insulin on time.

But the concern is that they've gained weight. So blood glucose control has gotten a little bit tighter. If they've gained weight as a result of that, is that, is that something that you see commonly or is that just sort of, "Oh, well it happens occasionally, but it's really not sort of based on anything physiologic"? What are your thoughts there?

Dr. Kushner: Yeah, I do see it, and I think it's mostly due to the initial drug or the specific drugs that are being prescribed for diabetes. And we're going to get into just a little bit later in some other podcasts, Jamy, where we talk about gluco-centric versus obesity-centric, you know, approach to obesity. But I think the weight gain, we see it mostly in someone who's been treated with insulin, a sulfonylurea, or a TZD. Very active good drugs for glucose control. However, it has a side effect often of weight gain.

And the nature of that weight gain is not entirely clear to me; and Jamy, I'm going to have you weigh in on this, weigh is on purpose. I say weigh in on this. Because we think of it often as, you know, the more diabetes is tightened up, the less sugar they're losing, right, and they're more anabolic, so they're gaining weight.

Another thought is that someone's appetite may be increased or redistribution of body fat or so forth. It's not, to me, entirely clear why that is; but it's pretty much medication-driven, glucose under better control, but these, but the side effect of these medications is often weight gain. Do you have a better understanding on why they're gaining weight?

Dr. Ard: So, the way I think about it is a few different things probably coming together. I totally agree with the things that you talked about in terms of if you just made the body more efficient in terms of moving that

glucose into those cells and if you're in a positive energy balance state, then you're going to basically move that extra energy into fat stores. So that's one way.

But, you also make the body, you know, sort of more susceptible to that because you're, all of those things that you talked about, aside from the TZDs, are really increasing insulin resistance, right? I mean they're, they're causing more insulin secretion. And so that's, that's only, in some ways, for a lot of people with Type 2 diabetes, it's just adding a little bit of fuel to that fire.

And then I think the other thing that we don't often appreciate, especially for those individuals who are on sulfonylureas and insulin is that, you know, those individuals are often afraid to be hypoglycemic because the, you know, it's a horrible feeling; and what do you do in order to avoid hypoglycemia? Well you eat, and you eat in, in, in anticipation of that hypoglycemia.

So, I think that is a real challenge for a lot of patients; and, and a lot of times when we start to talk about ways to mitigate those issues, especially the hypoglycemia and the unintentional weight gain, a lot of patients are afraid because they think, oh, well, I'm going to get hypoglycemic, especially if we talking about trying to introduce some weight loss.

So, you know, this is where I think a different class of medication can be really useful in terms of helping to assure the patient that you're not going to experience a hypoglycemia; and we can actually turn that metabolic state around from being hyperinsulinemic, inappropriately so, to one that is going to help us get better glu-, glucose control without that hyperinsulinemia.

Dr. Kushner: Yup, you are actually bridging the conversation from this kind of new generation of medications that, that are not only helpful in bringing blood sugar down but also debunking, I guess, this whole paradox that you don't have to gain weight in order to have improved glucose control because we have medications now that are entering the whole treatment approach that do both, right.

Dr. Ard: Right.

Dr. Kushner: Improve glucose control and help with the weight loss, which are going to make patients a lot happier.

Dr. Kushner: Okay, well that wraps up Episode 1. We hope you see that not only is a timely diagnosis and early treatment important, it's also important to have real conversations with your patient to address this unchartered territory they are about to embark on as Damion really highlighted so nicely.

Dr. Ard: Yeah.

See you next episode, and we're going to discuss the twin epidemics, "Prioritizing Obesity as a Treatment Target in Type 2 Diabetes." Stay tuned.

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