Boris Draznin: 00:04

Welcome and thank you for joining all of us here at the kickoff podcast for 2021, Know Diabetes by Heart™ podcast series. The purpose of this series of discussions is to reduce hopefully, cardiovascular death, heart attack, stroke, heart failure in people with type 2 diabetes. And it's based on a collaborative initiative between the American Heart Association and the American Diabetes Association, initiative known as Know Diabetes by Heart™. This series is brought to you with help of standing sponsors, Boehringer Ingelheim and Eli Lilly and Company, Diabetes Alliance and Novo Nordisk and national sponsors, Sanofi, AstraZeneca, and Bayer.

Boris Draznin: 00:53

I am Boris Draznin, endocrinologist, a specialist in diabetes, internal medicine and then joining here today with Dr. Pam Kushner, specialist in family medicine. And we will discuss how American Diabetes Association updated 2021 standards of care guidelines have changed and what the implications for practice. Welcome Pam. Welcome Dr. Kushner.

Pam Kushner: 01:22

Thank you, good to be here, Boris.

Boris Draznin: 01:24

My pleasure to be with you here too. And I kind of throw a first question upon you, see what you can answer to our audience. If I were to ask you, what's the most important element of 2021 updates from your perspective, what would you say?

Pam Kushner: 01:41

Well, that is an easy one for me, because to me, the tool is important. I'm going to take a speaker's prerogative. And number one, making sure that our patients are not becoming hypoglycemic. And number two, the emphasis on not having clinician inertia and the updated algorithm has made that much easier so that we can now identify patients who are of cardiovascular risk and kidney disease risk, not just patients who have these diseases already and pick out the right medications for this population. How about you, Boris?

Boris Draznin: 02:14

That's excellent. Excellent perspective. I would add one thing and it's not really any professional way of adding it, but I want to make sure that every physician who looks at those updated standards of care in his or her own mind creates actionable plan, to know how to actually implement any of those recommendations we have. It's not just a reference that's sitting on a shelf someplace, but I would like to imagine them to see that people actually know what to do to implement those guidelines.

Pam Kushner: 02:53

I agree.

Boris Draznin: 02:54

Perfect.

Pam Kushner: 02:55

Boris, can you kind of review some of these new glycemic targets and talk a little bit about the impact of very elevated A1C and time out of range on the increase in microvascular complications?

Boris Draznin: 03:08

Sure, absolutely. And the very elevated A1C, it's the point or point of discussion if you will that goes back many, many years and many decades. It's from diabetes control and complication trials that first we showed, and people involved in this trial show that the worst diabetes control in patients with type I diabetes is associated with progression of microvascular complication. And for each percent increase in hemoglobin A1C, there is a sizable enhancement in progression of those complications. We all know that very high levels of hemoglobin A1C are not good for our patients, not good for microvascular complications and they need to be addressed rapidly with new medications, with new approaches, but not forgetting old medications and old approach like diet and lifestyle. One can overeat any number of medications, so the nutritional approach is critical for all those patients.

Boris Draznin: 04:22

Now glycemic targets, the advantage of guidelines is in the fact that that recommends individualized approach to those glycemic targets. And one can say that the American Diabetes Association, once all the numbers be below seven of hemoglobin A1C, but there are instances in which patients with higher numbers are sufficiently well controlled for their disease, for their personal condition, for their functional status. Individualizing those targets are very, very important. And we'll come back to that in a minute because we will discuss new approach to targeting. It's not just hemoglobin A1C, it is more of a time in a particular range that designed to be beneficial for patient that we will discuss it in a few minutes, I would guess as we approach continuous glucose monitoring in those patients.

Pam Kushner: 05:26

Well, I'll jump in here Boris, because I see that you're mentioning continuous glucose monitoring and there's some very critical changes that happened on the latest 2021 update. And one of them is that the glycemic goals has been revised and divided into two parts to include the time and range goals. This is no longer the future. This is now time and range is an acceptable end point for clinical trials moving forward. That is amazing to me. And we want to remind patients that time and range means time below target and time above target, not just

time above target of a 180, let's say, but time below target of less than 70 and even less than 54. These glycemic goals are really important, and I would urge the audience to look at the new treatment algorithm and the new charts that are available for CGM that tell you what exactly look for. And those are so valuable for clinical care.

Pam Kushner: 06:25

And you've touched on another point that I want to bring up. You mentioned the idea of collaborative communication and this particular update emphasizes the collaborative approach, self-management, team-based care. We can no longer do diabetes totally by yourself, in your own office, away from everybody. We want to be using diabetes management experts that can actually increase the value of our limited time with our patients. And because of technology, we have such limited time, and these goals will help these patients have more control of self-management over their own chronic condition. Remembering that diabetes is not just one time, but it changes with time. It's a chronic condition. I love that idea of the chronic care model, which has been proven to decrease morbidity and mortality. Don't you agree?

Boris Draznin: 07:20

Oh, absolutely. Absolutely. While we are discussing this continuous glucose monitoring, the important points that were emphasized here in the updates also that it's not only for patients with type I diabetes, it's really a new tool that one should utilize for all patients that we have, whether in an individualized way of using those monitoring devices or professional approach, which I would ask you to maybe describe how you do it in real practice. I know you heavily involved in that model.

Pam Kushner: 07:58

I love CGM. It's so easy to use, people don't have to poke themselves all the time and the way I'm using it is now they no longer call it blinded CGM. Now they call it professional CGM. I can actually use this in my office. And what I like to do is I have the patient scan themselves regularly and then I may change that therapy. And then they can see how it's not just the medication that changes, but their reaction to stress, alcohol, physical activity, and most of all eating. And I've been able to pick up people who have a stress reaction, glucose jumps really high and people who one person and I'm sure you know this from your experience Boris, one person can eat a baked potato and it doesn't have the same reaction as a corn on the cob. It's really valuable for patients to learn that they do have the ability to help control this condition themselves and it gives them support.

Pam Kushner: 08:53

And I find it particularly valuable if you can use it with somebody who can help that patient with diabetes self-management outside of your own 15 minute or half an hour visit. It also lets patients to have more mindfulness, which is

mentioned in this new update, so that people have less diabetes distress because they feel more in control. One of the things I was going to ask you to do, Boris, is talk a little bit about obesity because we have what? Over 40% of the US population is overweight now. Maybe you could address some of the changes that are put in the latest guidelines.

Boris Draznin: 09:26

In the latest guideline, it actually specifically addressed in one of the sections of a guidelines, patients with obesity, overweight and diabetes and the number one approach, I guess, and it's been emphasized again and again and again, and it's in the updated version, that discussion cannot be with a blame of a patient for being overweight or being obese. Has to be very sensitive and sensitive to patient's need because most of them are not just overeating themselves to obesity. There are some underlying conditions. There are some maybe genetic factors involved. There are some other elements of disease. It is a disease that needs to be addressed very professionally as a disease.

Boris Draznin: 10:19

One has a new armamentarium of medications with obesity. One has new approach to intermittent fasting or a very low-calorie approach for number of months until weight is lost. One has to consider very carefully potential for bariatric surgery for these patients. For many, it may be a really curative approach, not only to their obesity, but for diabetes and hypertension as well. It is an important chapter section to read, to understand and the approach to patient is the key, a new element in these updated standards of care.

Pam Kushner: 11:05

Excellent job, Boris. The only thing I would add is in addition to the nonjudgmental language, which is urged, but have more discussion about the health outcomes of weight loss with our patients. And it also takes into account the social determinants of health. And I loved the one line I love more than anything is when you choose a glucose lowering therapy for a patient, please consider that medication's effect on weight. In addition to the polypharmacy that they're taking so many other things that can be affecting their weight. That's totally, definitely true.

Boris Draznin: 11:35

Absolutely. And behavioral aspects of that, which are also emphasized in a separate section of the updated standards of care, exceptionally important. I'm glad you brought that social determinants of health of which food insecurity, housing insecurity, are so important. And it's very important to understand how those factors influence the control of diabetes in our patients, but even beyond understanding, what's important to know how you actually dealing with those points. Within this short interval of time, the most we can do is identify those problems. And very frequently, we don't even do that. But once they're identified as social determinants of health and particularly now at a time of

unemployment, COVID, people lost their jobs, lost money, it's so important to be able to find a way to deal with this problem, whether it's through your social services, whether groups of physicians can combine to use the same social workers or whatever the problem is to be addressed. Understanding is not enough to be able to address that, that's the key.

Pam Kushner: 12:51

Very true, very true.

Boris Draznin: 12:53

The most, I think, useful approach to that section was that we recognize the functional state of a patient. The elderly is kind of a general term applied usually with people 65 and over so when you have your 65th birthday, something happens to you now.

Pam Kushner: 13:13

Right, you're elderly.

Boris Draznin: 13:16

That's right. People can remain very healthy at 70, 75 and beyond that. It's just the functionality of that person. It's the comorbidities. It's other diseases that person has. It's the place where a person leads up. In very healthy and playing tennis or jogging individuals, the control of diabetes with A1C below seven is still appropriate. However, once you get onto other medical problems that you cannot move, you cannot exercise, you have other problems, rheumatoid arthritis, hypertension, heart failure, you name it, then the relaxed a little bit control is appropriate. And certainly, in people with terminal conditions, terminal diseases, no one needs to push hemoglobin A1C down to that range. We just have to avoid hypoglycemia and hyperglycemia and maintain these people in a reasonable functional level.

Boris Draznin: 14:19

Before our time is up, let me just jump and ask you about screening for chronic kidney disease and screening maybe for heart failure. What do we do with these problems that now could be identified so early? And how do we approach those problems?

Pam Kushner: 14:37

Basically, we're talking about the microvascular complications in foot care section. And I think the most important part of this section is that the microvascular complications have been broadened into three parts, basically been broken down so that clinicians can individualize based on renal function and cardiovascular risk. If you look at 11-3 A, B and C, they each give you a recommendation as to who you need to consider SGLT2 inhibitors in. And these are patients who have an estimated glomerular filtration rate greater than or

equal to 30 and patients who have a urinary albumin greater than 300 and also to consider it in terms of risk reduction.

Pam Kushner: 15:21

And when they're talking about GLP-1, they're talking about patients with chronic kidney disease who have an increased risk for cardiovascular events, so one receptor agonists to have reduction of that renal endpoint progression. To me, Boris, this is amazing because when we look at the risk of progression of albuminuria and the fact that we have so many dialysis centers in the United States, we finally have excellent evidence that supports us doing something early, early, newly diagnosed diabetes, diabetes which has been there for 15, 20 years, 30 years. We have something that may delay and proven to delay the onset of dialysis and end stage renal disease. And to me, this is amazing. I'm so glad that I'm able to live in a time of treating diabetes with these updates.

Boris Draznin: 16:17

This is a great answer and great perspective of that. The problem, what I see that those agents are not utilized enough at this point. A very small percentage of patients are actually placed on them. And there are some objective obstacles to that obviously. It's hard to deal with insurance companies, those agents are expensive. It takes time for pre-authorization and all that nonsense that we have for patients who really require those medications. Short of really revolutionizing approach to diabetes, this is a huge step in improving outcomes, cardiovascular and renal for our patients. And what is also not well appreciated is that these medications can be used regardless of glycemic control.

Pam Kushner: 17:12

No question. This to me is the major change that we have yet to bring up in the algorithm. I refer people to look at table 9.1, 9.2. And what you're going to learn from this is that independent of A1C or the use of metformin, you need to be looking at that patient individually and be able to find usages for this cardio and renal protective class of medications, particularly GLP-1 receptor agonists and SGLT2 inhibitors. In fact, what I find interesting is they do have now, which they did not have last year, a dedicated pathway to both CKD and particularly heart failure with reduced ejection fraction, which I had mentioned earlier. You have a dedicated pathway now for each of those and it's not just patients who they're not lumped together. I also like the idea that they have intensification to injectable therapy.

Pam Kushner: 18:10

You should be thinking about looking at that insulin dose and maybe choosing a GLP-1 receptor agonist in the patients who have type 2 diabetes. This might help us reduce the number of patients that are having such a tremendous outlay for insulin costs that they are not even using appropriately and that are having overbasalization, which is also addressed in the latest update.

Pam Kushner: 18:33

And finally, one of the most important things I think was brought up in this is, is this not just our problem. This is a society problem. This is probably one of my favorite things about the updates. We need to as a society say, "Why is it that we have this social determinate of healthcare that affects the poorest people, the patients who may be the sickest and have all these other social determinants of healthcare and they don't have access to these very medications that we have scientific proof would help them rise so that they would have less morbidity and mortality?"

Boris Draznin: 19:09

Oh, how true it is. It's an excellent, excellent point. And what would you, although it may not be necessarily in the update that dramatically featured, but what's the pharmacologic intervention for high blood pressure, for hypertension that you might address today?

Pam Kushner: 19:27

Well, you know what? I'm so glad you brought that up, Boris, because we had talked a little bit about that and this was not really updated, but what I'm seeing, because I do a lot of teaching is, I'm seeing that clinicians forget that the studies that support some renal protection, but not as good as adding the SGLT2 inhibitors, the studies that support that are using maximum doses of ACEs or ARBs. I just want to urge people that two things, number one, go for the maximum tolerated dose. This is not just this year's standard of care, it's last year's, so get with it. And the other point is that in patients who have macro albuminuria, oftentimes these medications are avoided, but remember that this is just an initial elevation in some of the BUN and creatinine that we're monitoring and that over time our patients should be able to get a benefit.

Boris Draznin: 20:16

Absolutely. That's exactly, I'm kind of a repeating maybe myself. I want people to look at those standards and create in their own hand, the actionable way of achieving those standards. How they're going to do it. That's so important. And a kind of final maybe question is the role of new way of communicating, all this telemedicine, phone apps, how they relate to improvement of care or no improvement or maybe even we shouldn't be using it. But I think technology is moving so fast as it will be a great tool. What do you think about that, Pam?

Pam Kushner: 20:57

I agree with you. I think you brought up both points, Boris. The technology is wonderful. We have apps, we have CGM, we have many tools that we can use. The problem is, we as clinicians have only so much time. And so that's why I brought up the idea of our society at some points has to go into this chronic care model and recognize that this is a chronic condition and that if we can use this as a team, if we can develop resources, then we'll really have quality-oriented culture, which is what we are lacking. We have to have a way to

implement these tools so that everybody's on board with it. And that we have the time using the team approach to have the best outcome for our patients.

Boris Draznin: 21:38

Perfect. Perfect. I think we have a good discussion with you Pam today. Really appreciate that. Thank you so much for joining me in this discussion. I'll just want to thank everyone for listening. Stay tuned for upcoming podcasts in this series. And thank you, Pam, and thank you both American Diabetes and American Heart Association for taking it so seriously and so appropriately.

Pam Kushner: 22:02

Thank you, Boris. Pleasure working with you.