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Cardiovascular Risk Reduction in Type 2 Diabetes & ASCVD: An Interventional Cardiologist's Perspective

ReachMD Announcer:

Welcome to *Heart Matters* on ReachMD. This episode is sponsored by Novo Nordisk. Here's your host, Dr. Jennifer Caudle.

Dr. Caudle:

Type 2 diabetes and atherosclerotic cardiovascular disease, or ASCVD for short, can have detrimental impacts on our patients. In fact, it's been shown that life expectancy for patients with both type 2 diabetes and ASCVD may be nearly 15 years shorter than those without diabetes.¹ So how can we reduce the risk of major adverse cardiovascular events for these patients?

Welcome to *Heart Matters* on ReachMD. I'm your host Dr. Jennifer Caudle, and joining me in this discussion is Dr. Robert Chilton, Professor of Medicine and Director of the Cardiac Catheterization Laboratory at the University of Texas Health Science Center at San Antonio. Dr. Chilton, welcome to the program.

Dr. Chilton:

Well thank you so much for inviting me to this exciting program.

Dr. Caudle:

So to start us off, Dr. Chilton, can you tell us why type 2 diabetes has become so prevalent over the years?

Dr. Chilton:

Well, in my opinion, most of this stems from the high prevalence of obesity, which sadly remains an epidemic.²

Over the years, I have gone from seeing one a patient with diabetes per year to one a *month*. And now, 80 percent of my operating room schedule consists of patients with cardiovascular disease and type 2 diabetes.

And then there's the impact of arteriosclerotic cardiovascular disease, which is the number one cause of death and disability in patients with type 2 diabetes and has shown to occur 14.6 years earlier than in patients without diabetes.¹

What's more, a large, prospective cohort study from the Emerging Risk Factors Collaboration showed that life expectancy is reduced by up to 19.8 years in adults with type 2 diabetes and a history of both myocardial infarction, or MI for short, and stroke.³

And patients with type 2 diabetes have a two to four times higher risk of stroke and MI compared with those without type 2 diabetes.⁴⁻⁷

In fact, an adult with type 2 diabetes is hospitalized for stroke every two minutes in the United States.⁷

Dr. Caudle:

Now before we dig deeper into those troubling statistics and their implications, Dr. Chilton, let's review some guidelines and recommendations. What are the recent recommendations from major societies regarding treatment of patients with type 2 diabetes and established cardiovascular disease, or CVD?

Dr. Chilton:

Well, we have two sets of guidelines to refer to the ACC 2020 Expert Consensus Decision Pathway and the updated Standards of Medical Care in Diabetes 2022.

Both sets of guidelines recommend GLP-1 receptor agonists with proven cardiovascular benefit, which ADA defines as having a label indication for proven CVD benefit, or an SGLT-2 inhibitor with proven CVD benefit as first-line options for patients with ASCVD or at

high risk of ASCVD.⁸⁻¹⁰

And patients with or at high risk for heart failure can also benefit from SGLT-2 inhibitors with proven cardiovascular benefit.^{8,9}

Dr. Caudle:

So how important are these new developments within the treatment landscape for patients with ASCVD and type 2 diabetes? Are there any questions still remaining for you?

Dr. Chilton:

These recommendations are viewed as a major development because they include therapeutic options that, in addition to providing glycemic control, also have proven cardiovascular benefit for patients with type 2 diabetes and established arteriosclerotic cardiovascular disease.⁹

However, I have noticed that the terms "cardiovascular disease" and "arteriosclerotic cardiovascular disease" have been used interchangeably by the guidelines and the industry. They both co-share risk factors for heart disease, but they are indeed different.

So I'd like to clarify that cardiovascular disease is the umbrella term under which conditions such as arteriosclerotic cardiovascular disease and heart failure fall. In fact, in a recent large U.S. retrospective cohort study in newly diagnosed patients showed that, over the span of 10 years, the combined incidence of arteriosclerotic cardiovascular disease was three times more prevalent than heart disease alone in patients with type 2 diabetes.¹⁰

Dr. Caudle (Audio Only):

For those of you who are just tuning in, you're listening to *Heart Matters* on ReachMD. I'm your host Dr. Jennifer Caudle, and I'm speaking with Dr. Robert Chilton about the risk of major adverse cardiovascular events in patients with type 2 diabetes and established ASCVD, and how we can help mitigate that risk.

Dr. Caudle:

And Dr. Chilton, now that we know more about these new recommendations, what are the next steps for cardiologists?

Dr. Chilton:

Sure, so clinicians haven't been treating patients with type 2 diabetes and established cardiovascular disease, including patients beyond those who've had a stroke or MI, with any sense of urgency to address a subsequent cardiovascular event.⁸

Because of the increased risk for an additional cardiovascular event, we need to encourage this urgency in our clinicians in an effort to reduce the risk in patients with type 2 diabetes and established ASCVD.

We also need to better differentiate the definitions of ASCVD and CVD.

And finally, choosing the correct therapy, whether it's a GLP-1 receptor agonist or an SGLT-2 inhibitor with proven CVD benefit—which according to the ADA means that it has a label indication for proven CVD benefit—is key to properly managing patients with ASCVD and type 2 diabetes.⁹

Dr. Caudle:

Now unfortunately we're almost out of time for today, but before we close, Dr. Chilton, do you have any final thoughts to leave with our listeners?

Dr. Chilton:

There needs to be a shift in thinking toward collaboration across specialties, especially in the high-risk patient population with multiple comorbidities.⁸

Cardiologists really need to work together with diabetes specialists and other healthcare professionals to optimize care for patients with ASCVD and type 2 diabetes, including primary care physicians, endocrinologists, and nurse practitioners.⁸ Our patients deserve our collaboration.

Dr. Caudle:

Well, considering the serious cardiovascular risks many patients with type 2 diabetes face, I'd like to thank my guest, Dr. Robert Chilton, for joining me to talk about the latest evidence-based recommendations toward reducing the risk of MACE. Dr. Chilton, it was great having you on the program.

Dr. Chilton:

It was certainly a pleasure to be here today.

ReachMD Announcer:

This episode of *Heart Matters* was sponsored by Novo Nordisk. To access other episodes in this series, visit ReachMD.com/heart-matters, where you can Be Part of the Knowledge. Thanks for listening!

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