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Aggressive Cardiovascular Treatment Needed for People With Diabetes

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Diabetes has long been recognized as a multifactorial disease affecting primarily the cardiovascular (CV) system and leading to premature death. People with diabetes are 2 to 4 times more likely to die of a CV event than those who do not have diabetes [1]. Abnormal cholesterol levels result in higher mortality. In secondary prevention of CV events, the value of aggressive lipid reduction is recognized. Yet, in people with diabetes without manifest vascular disease, there is a tendency to be much less aggressive, despite the fact that these patients have as high risk of a CV event as a person with diabetes who has had a CV event [1]. Thus, primary prevention in persons with diabetes should be as aggressive as secondary prevention in those without diabetes. Lifestyle modifications—including nutrition interventions, weight control, smoking cessation and exercise— remain key components of CV prevention and management. However, many patients will be unable to achieve lipid targets without pharmacologic intervention. In this issue of *Canadian Diabetes*, Leiter and colleagues present highlights of the Canadian Diabetes Association 2006 Clinical Practice Guidelines entitled "Dyslipidemia in Adults With Diabetes" [2], an update of the Canadian Diabetes Association 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada [3].The Clinical Practice Guidelines Expert Committee recognized the high CV risk associated with diabetes and the impact of dyslipidemia on CV morbidity and mortality. Two key recommendations in these guidelines are [2]:

- In adults, the primary goal of lipid treatment is to achieve a low-density lipoprotein cholesterol (LDL-C) target of ≤2.0 mmol/L to decrease the risk of CV events [4]. This has been reduced from the previous recommendation of <2.5 mmol/L.To achieve these levels, Leiter et al recommends that first line pharmacological treatment should consist of optimally dosed statin therapy.
- The secondary target is to reduce the total cholesterol (TC)/high-density lipoprotein cholesterol (HDL-C) ratio to <4.0 mmol/L.

As more evidence becomes available, clinical practice guidelines are being changed to reflect this new evidence. It remains undisputed that evidence-based guidelines are the framework for the provision of good care, but what are the challenges in the dissemination and application of these guidelines? Are people with diabetes always managed according to guidelines- based care? As Leiter and colleagues note in their paper, the Third American National Health and Nutrition Examination Survey (NHANES III) data showed that 82% of people with diabetes have at least 1 additional CV risk factor (e.g. age, smoking, hypertension, family history, dyslipidemia etc.) and should be receiving aggressive risk reduction interventions [5,6]. Yet, a recent Canadian study demonstrated that only 21% of people with type 2 diabetes are treated with any lipid-lowering agents at all [7]. This illustrates a care gap that may result from any disruption of the chain of events leading from the publication of evidencebased clinical practice guidelines through to its actual application to patient care. The publication of guidelines in itself has not been shown to have a significant effect on physicians' case management behaviour or patient outcomes. Rather, an effective dissemination plan is required, which includes presentation of guidelines in "manageable, continuous and reinforcing formats, as well as in settings that are known to facilitate understanding and change" [8]. Facilitating the ease of implementing new guidelines is paramount, as family physicians' practices include medical issues that encompass the entire lifespan; moreover, they are swamped with a myriad of guidelines related to multiple diseases, and keeping up to date on all of them is a mammoth job.Thus, implementation tools to help them integrate recommendations into their practice should be included in any clinical practice guidelines dissemination plan. Patient adherence to treatment recommendations presents another barrier to reducing mortality from diabetes.We must tackle this barrier with patient education and empowerment, consistent follow up and encouragement. Family physicians may not have control over barriers to optimal care, including socioeconomic issues (e.g. financial constraints, mobility, employment status), but they must be cognizant of the fact that these challenges exist. Despite these challenges, it remains undisputed that evidence-based guidelines offer evidence for good care. Thus, the dyslipidemia guidelines highlighted in this issue provide family physicians with the evidence, knowledge and tools to manage dyslipidemia in diabetes. These guidelines offer physicians a framework to reduce CV morbidity and mortality, and, in turn, achieve a better quality of life for clients with diabetes, by:

- Providing care in accordance to evidence-based clinical practice guidelines.
- Supporting people with diabetes in the primary prevention of CVD through lifestyle modifications, including nutrition modifications, weight control, smoking cessation and exercise.
- Prescribing a statin as a first-line therapy for those with dyslipidemia.
- Prescribing the right statin in the correct dosages to achieve target.
- Supporting patient self-management, by recognizing and addressing the barriers.
- Following up to ensure patients have reached target, and to monitor potential side effects and drug interactions. It is our hope that primary care practioner implement these guidelines swiftly and completely into practice to achieve the goal of minimizing the burden of diabetes and dyslipidemia for people with diabetes.

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