When a quick sound bite won't do

Over the past year we have read about intervention trials in patients with chronic atherosclerotic cardiovascular disease¹ and diabetes^{1,2} that yielded surprising results. These trials have prompted some to question the most basic underpinning of our management of these diseases, ie, that aggressively lowering low-density lipoprotein cholesterol (LDL-C) and glucose (hemoglobin A_{1c}) truly helps our patients.

The sound bites about these trials in the news have confused physicians and patients alike. But, as we have all experienced during this election year, to understand complex problems requires an in-depth analysis instead of a sound bite.

I was troubled by the results of the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial,² in which more patients who were treated with an intense hemoglobin A_{tc}-lowering strategy died (mostly of macrovascular events) than those treated with a standard strategy. Older data showing a beneficial effect of glucoselowering on the microvascular complications of diabetes are solid. I did not understand the mechanistic basis of the ACCORD results, unless the very aggressive therapy caused many hypoglycemic events with catecholamine surges, resulting in stroke or myocardial infarction, or whether a problem with a specific drug arose more often in the intensive-treatment group. There has been similar dialogue surrounding intensity of glucose control in critically ill inpatients³; here, the data suggest that hypoglycemic episodes may limit other benefits of aggressive treatment in the intensive care unit, such as reduced infection rates.

Not to be ignored is that the patients in all arms of the ACCORD trial fared far better than historical diabetic controls. The meticulous attention to management of blood pressure and LDL-C that all patients in the ACCORD trial received paid off. (If only we could do as well in our practices!) But what do we do about the sugar?

This large, well-done, ongoing trial deserves a detailed analysis for those of us who need to translate the conclusions regarding glucose control to our patients. This month in the Journal, I have invited Byron Hoogwerf, a clinical diabetologist, former internal medicine program director, well-published clinical trialist, and ACCORD investigator, to provide this analysis.⁴ His discussion is more detailed than what we often print purposefully, and it is well worth reading. Some issues simply can't be understood as a sound bite.

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