Editorial

Do not forget that type 2 diabetes does not only expose to cardiovascular complications

Since the 1990s cardiovascular risk, especially coronary artery disease, has been increasingly recognized, screened and treated in people with type 2 diabetes [1]. After the rosiglitazone “affair” in 2008, the FDA delivered a new Guidance for Industry requiring that pre-approval and post-approval studies for all new glucose-lowering drugs must study and exclude the possibility of excess cardiovascular risk. A little later, the ACCORD and VADT studies warned about the risk of tighter glycaemic control, mainly in frail patients, as statistically it was related to severe hypoglycaemic episodes; some patients with a less stringent HbA1c also experienced severe hypoglycaemia. Thus, over the past decade, the debate about the treatment of people with type 2 diabetes has gradually and exclusively focused on their cardiovascular complications. Undoubtedly, the mortality of these patients is dominated by their cardiovascular risk. Moreover, on the basis of the post-hoc analysis of the UKPDS Trial and of subsequent clinical trials, several meta-analyses have been published, such as the review paper by Bous sageon et al. in this issue of the journal [2]. They conclude that neither strict glycaemic control [3] nor one class of glucose-lowering drugs, including insulin, [4] have demonstrated their ability to reduce cardiovascular risk in type 2 diabetes, unlike medications that target lipid abnormalities and hypertension. In their answer, Scheen and Charbonnel [5] have clearly argued how this can be explained. First and foremost, the cardiovascular risk in people with type 2 diabetes is very early in the natural history of the disease and begins before diabetes diagnosis. Thus, to prove the benefits of glycaemic control on cardiovascular complications, these studies should be undertaken early and over a very long time. In addition, cardiovascular risk has been greatly reduced by statins and anti-hypertensive drugs. The risk of such meta-analyses might be to conclude that the treatment of hyperglycaemia is useless and to completely forget its major role, that of preventing microangiopathy. Can we expect to again see many patients with severe retinopathy, nephropathy, neuropathy, that we have taken several decades to eradicate or reduce by carefully monitoring glucose control? Is it conceivable that a patient with a poor HbA1c is neglected for years, on the pretext these meta-analyses are not conclusive? The UKPDS post-trial study has clearly demonstrated that there is a memory of better glycaemic control and that early treatment of hyperglycaemia protects patients for several decades. Over this longer follow-up time, risk reductions emerged for myocardial infarction and death from any cause that were not seen earlier in the UKPDS [6]. The VADT trial shows that if the duration of diabetes is less than 10 years, glycaemic control is beneficial on the cardiovascular event rate [7]. These arguments justify the importance of paying attention to glycaemic control as well as treating other cardiovascular risk factors and endorses the principle of individualization of treatment goals, as proposed by the ADA-EASD statement [8]. We should expect those who analyze thousands of data in their meta-analyses, are aware of the disturbing effects that their conclusions might cause. One begins to see a trend that some practitioners doubt the value of treating hyperglycaemia, with the risk of accentuating the already significant clinical inertia. The recent controversy over the alleged adverse effects of new oral glucose-lowering agents produces an additional doubt in the minds of practitioners [9]. We have waited several decades following efforts to improve glycaemic control, to see an increase in life expectancy and quality of life of our patients, without complications of blindness, painful neuropathies, diabetic foot, end-stage renal disease, infections. It would be very unfortunate to turn the clock back, despite progress in awareness campaigns among caregivers and patients. We must be aware that we “all” have responsibilities. Our duty is not to just focus on glycaemic control, nor to forget that many people with type 2 diabetes are not treated or are above target for lipid and blood pressure control [10]. In their conclusions, authors of meta-analyses also have duties. Any analytical approach has its limitations and it is imperative that authors do not ignore the consequences of their conclusions on the behaviour of practitioners towards the health of their patients. Certainly, fight cardiovascular risk, but without forgetting that people with type 2 diabetes are also at risk of...
microvascular complications with terrible consequences! So, be careful not to throw the baby out with the bathwater.

Disclosure of interest

The author has not supplied his declaration of conflict of interest.

Acknowledgement

S Halimi has received fees for consultancy, speaking, travel or accommodation from: AstraZeneca, Boehringer-Ingelheim, Bristol Myers Squibb, Eli Lilly, GlaxoSmithKline, Janssen, Merck-Serono, Merck Sharpe & Dohme, Novartis, Novo-Nordisk, Sanofi, Takeda.

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Received 26 March 2014
Accepted 26 March 2014
Available online 18 April 2014