Prediabetes or what’s in a name?

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Like the Phoenix rising from its own ashes, the word “prediabetes” almost abandoned for many years, has now reappeared both in the literature and at meetings. Up to the end of the 1970’s, the word “prediabetes” was used for identifying individuals with an abnormal glucose tolerance curve, what we call today “impaired glucose tolerance”. Such was the case, for instance, in the classical Précis de Diabétologie published by Maurice Dérot. Two considerations led the WHO experts to recommend reconsideration of that use of the word. First, several epidemiological studies had shown that not all people with abnormal glucose tolerance in fact develop diabetes and, second and consequently, that it was inappropriate to label “diabetic” some people who indeed would never develop the full condition.

In the years 1979-1980, and based on the opinion of experts like WPU Jackson and Kelly West that the diagnostic of prediabetes can only be made in retrospect, WHO officially recommended the word “prediabetes” to be used solely as “a retrospective diagnosis to describe the state of a person which preceded the diagnosis of diabetes in that person”.

As recently reviewed by the immediate IDF Past-President Sir George Alberti at the 1st International Congress on “Prediabetes” and the Metabolic Syndrome held in Berlin in April 2005, terms like “Impaired glucose tolerance” (IGT) and, more recently, “impaired fasting glucose” (IFG) have become progressively used.

Sir George dates the rebirth of the word “prediabetes” precisely to March 27, 2002 in Washington when the US Secretary of Health, Mr Tommy Thompson considering that some 36 million Americans are at risk of diabetes, a figure including those having IGT, IFG or both, communication would be better if they were all labelled as having “prediabetes”. To quote Alberti, the new use of the word “prediabetes” describes individuals “with a high risk of developing diabetes in the future and already showing a glycaemic abnormality. Pragmatically, this new usage of the term prediabetes may be useful it that it conveys a clear message. However, there are possible problems. Thus those with a first degree family history of type 2 diabetes will be at a high risk but may not yet show any abnormality in glucose levels. Also not all those with IFG or IGT will develop diabetes—even without intervention— with all the problems that come from an incorrect label”.

It is with those considerations in mind that the readers of Diabetes & Metabolism should examine the article presented in this issue by Paul Valensi and his colleagues and entitled “Pre-diabetes Essential Action : A European Perspective”. This article has several merits. First, it is a collective effort of authors of different backgrounds: educator, epidemiologist, general practitioner, endocrine-diabetologists. Second and as announced in the title, it is centred on Europe where it is estimated that over 60 million people are thought to have prediabetes. Third, it aims to be practical and offering answers to frequently asked questions. Fourth, it makes proposals for tackling the problem right now while recognizing that more prospective studies are needed.

It is not the place in such an Editorial to argue neither on the choice and nature of the 10 selected questions nor on the offered answers. Just to pick one, Question one: Can we agree on a definition of prediabetes? The answer provided does not fit completely with what I have mentioned above. It includes pathophysiological considerations involving insulin resistance and beta cell dysfunction that are not yet fully validated. This reinforces the view of Alberti that “what is needed now is absolute clarity about the meaning of the term prediabetes and perhaps some refinement to include all high risk individuals”. The article by Valensi et al does not bring a definite answer, it has the merit to add a European piece on the huge worldwide puzzle, and, more than anything, it proposes actions which, if not yet all fully validated, obviously go in the right direction.

Liège, July 29, 2005

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