OBSERVATIONS

The Cardiovascular Relevance of Celiac Disease

We read with great interest the recent article by Leeds et al. (1) regarding the effect of the presence of celiac disease (CD) on glycometabolic parameters in type 1 diabetic subjects and, above all, on diabetes-related microvascular complications. Indeed, several epidemiological and genetic studies strongly suggest a more-than-random association between type 1 diabetes and CD (2,3), but no current guidelines encourage different approaches in patients with the coexistence of the two diseases in terms of glycometabolic targets and/or screening of vascular complications.

We recently published a similar study (case-control) (4) that showed that the presence of CD is also associated with an increased intima-media thickness of the carotid arteries, a well-known intermediate marker of endothelial dysfunction and macrovascular disease. Therefore, although the intrinsic nature of the two studies does not allow for a definitive demonstration of a cause and effect relationship between CD and diabetes-related micro- and macrovascular complications, we strongly believe that:

1) Type 1 diabetic patients with an early presence of micro/macrovascular complications (in particular at the diagnosis) should be screened for CD; this is also true in the case of persistently high HbA_{1c} values ("brittle diabetes").
2) The coexistence of CD and diabetes causes a worsening of metabolic control, above all if the former is not treated, which probably puts these patients in a higher-risk category. This is why it is reasonable to consider a more frequent screening for complications and to define different glycometabolic targets in this group of subjects. The consequence could be the application of different lowering-risk strategies, for example an early intervention with a statin and/or aspirin.

We are well aware that these are, to date, just speculations. However, a growing body of evidence, including these two studies, suggests that we urgently need randomized controlled trials to explore these hypotheses.

DARIO PITOCCO, MD[1]
FRANCESCO ZACCARDI, MD[1]
FRANCESCA MARTINI, MD[1]
SIMONA GIUBILATO, MD[2]
GIOVANNA LIUZZO, MD[2]
FILIPPO CREA, MD[2]
GIOVANNI GHIRLANDA, MD[1]

From the [1]Department of Internal Medicine, Diabetes Care Unit, Catholic University, Policlinico A. Gemelli, Rome, Italy; and the [2]Institute of Cardiology, Catholic University, Policlinico A. Gemelli, Rome, Italy.

Corresponding author: Dario Pitocco, dario.pitocco@rm.unicatt.it.

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