COMMENTS AND RESPONSES

Comment on: Leeds et al. High Prevalence of Microvascular Complications in Adults With Type 1 Diabetes and Newly Diagnosed Celiac Disease. Diabetes Care 2011;34: 2158–2163

We read with interest the article by Leeds et al. (1) describing the prevalence of increased microvascular complications in patients with type 1 diabetes and newly diagnosed celiac disease (CD).

Leeds et al. stated that adults with type 1 diabetes and undetected CD have worse glycemic control with more renal disease and more retinopathy compared with patients with type 1 diabetes alone. The newly diagnosed CD patients in the cohort of type 1 diabetes patients are matched for age, duration of type 1 diabetes, and weight. We believe that one critical point by which the increased prevalence of microvascular complications in patients with CD and type 1 diabetes could be influenced is not taken into consideration. In type 1 diabetes, HbA_{1c} levels are an important predictor of the development of complications (2) and are a possible confounder in the prevalence of retinopathy and neuropathy. In the presented study of Leeds et al., the study group (CD and type 1 diabetes) and control group (type 1 diabetes only) have not been matched for HbA_{1c} levels. Therefore, it cannot be excluded that after matching case and control subjects for HbA_{1c} levels, a trend in the prevalence of these complications will not be found.

As many studies have investigated the prevalence of CD in adult type 1 diabetic patients (3) only few have studied this in the context of glycemic control. Until now, conflicting results have been published regarding glycemic control in adults with type 1 diabetes and undetected CD. Increased HbA_{1c} levels at diagnosis of CD have been observed previously (4), and similar findings are reported by Leeds et al. (1). Nevertheless, data are not uniform since decreased HbA_{1c} levels at CD diagnosis have been reported as well (5). The different outcomes of the studies might relate to factors such as small sample size, size of the control group, and a different matched control group.

Up until now, no clear consensus exists about the need for screening for CD in adult type 1 diabetic patients. Taken together, if indeed the prevalence of microvascular disease is higher in type 1 diabetic patients with newly detected CD, corrected for HbA_{1c} levels, this implicates that screening for CD in adults is mandatory.

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References

1. Leeds JS, Hopper AD, Hadjivassiliou M, Tesfaye S, Sanders DS. High prevalence of microvascular complications in adults with type 1 diabetes and newly diagnosed celiac disease. Diabetes Care 2011;34: 2158–2163
2. The Diabetes Control and Complications Trial Research Group. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. N Engl J Med 1993;329:977–986
3. Holmes GK. Coeliac disease and Type 1 diabetes mellitus - the case for screening. Diabet Med 2001;18:169–177
4. Depczynski B. Coeliac disease and its relation to glycaemic control in adults with type 1 diabetes mellitus (Letter). Diabetes Res Clin Pract 2008;79:e10
5. Picarelli A, Sabbatella L, Di Tola M, et al. Anti-endomysial antibody of IgG1 isotype detection strongly increases the prevalence of coeliac disease in patients affected by type I diabetes mellitus. Clin Exp Immunol 2005;142:111–115