COMMENTS AND RESPONSES

Comment on: McDonald et al. High-Sensitivity CRP Discriminates HNF1A-MODY From Other Subtypes of Diabetes. Diabetes Care 2011;34: 1860–1862

We have read with great interest the article recently published by McDonald et al. (1) replicating the initial study of Owen et al. (2), which demonstrated that high-sensitivity C-reactive protein (hs-CRP) levels are lower in hepatocyte nuclear factor 1-α (HNF1A) maturity-onset diabetes of the young (MODY) patients in comparison with other forms of diabetes, including type 2 diabetes. Five years ago, we published that the presence of clinical and metabolic features related to the metabolic syndrome could be of help in discriminating HNF1A-MODY and type 2 diabetes diagnosed in young adults (3). Among them, we included hs-CRP (0.6 ± 0.2 vs. 1.7 ± 0.6 mg/dL, HNF1A-MODY, and type 2 diabetes, respectively; $P < 0.001$) interpreting that higher levels of hs-CRP in type 2 diabetes reflected the presence of low-grade inflammation associated with metabolic syndrome (4). We now know that we misinterpreted the significance of that observation. The *CRP* gene has HNF1A binding sites in its promoter, and it is downregulated in liver from mice lacking HNF1A (5), thus the association of hs-CRP levels and *HNF1A* gene mutations is not unexpected. Unfortunately, we did not measure hs-CRP in a group of subjects with type 1 diabetes or in a control group in order to discriminate between other subtypes of diabetes and normal conditions. It is possible that the combination of lower levels of hs-CRP in subjects with HNF1A-MODY caused by reduced CRP expression and higher levels in type 2 diabetes because of a low-grade inflammation state could contribute to enhance the difference observed in hs-CRP levels between both diseases.

In accordance with the two abovementioned recent publications (1,2), we now know that lower levels of hs-CRP in HNF1A-MODY may be used as a biomarker to select patients for diagnostic HNF1A genetic testing. Its utilization may be of considerable value in improving diagnosis rates of MODY.

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