RESPONSE TO COMMENT ON CASTELLANETA ET AL.

High Rate of Spontaneous Normalization of Celiac Serology in a Cohort of 446 Children With Type 1 Diabetes: A Prospective Study. Diabetes Care 2015;38:760–766

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We read with interest the comment by Maltoni et al. (1) concerning the possibility that, differently from what we have recently reported (2), in children with type 1 diabetes mellitus (T1DM) anti-endomysial antibodies (EmAs) might take several years to become negative despite an unrestricted diet and that this behavior might also extend to the tissue transglutaminase antibodies (tTGAs). Although they raise an interesting hypothesis, we believe that some considerations are needed.

First, the overall setting described in the article by Salardi et al. (3) is not comparable with ours (2) because of the different epoch of the assessment and the mixed prospective/retrospective nature of the study and mainly because there are no data on the tTGA levels in their report. Indeed, when reading their short communication (3), it becomes clear that out of the 29 children with diabetes found to be EmA positive, 6 were managed differently and did not undergo biopsy either because they had borderline EmA positivity (2 cases) or because the EmA became negative while the patient was on a gluten-containing diet (4 cases), probably before biopsy decision and therefore much earlier than the time reported in the comment (1). Moreover, out of the 23 patients who underwent intestinal biopsy, celiac disease (CD) was confirmed in 20 and the time described of 2–8 years to become EmA negative referred to just 3 children. Salardi et al. (3) do not clearly state the time needed to reach EmA negativity in the 6 patients that were not candidates for biopsy.

Second, it is still important to remember that EmA is operator dependant and it is still possible that in some circumstances there were transient false-positive EmA tests, as previously reported in a similar setting (4). Finally, the speculation on the different timing of negativity of EmA and tTGA tests remains uncertain and difficult to support in the absence of tTGA data in the article by Salardi et al. (3).

All these data support the knowledge that currently the diagnosis of CD in T1DM deserves all the diagnostic accuracy of serological tests: tTGA has to be considered the first choice because of its higher sensitivity for CD (98%); however, it may give some false positives. Therefore, EmA should be used as a confirmatory test, especially in cases of low-titer tTGA positives (5).

Finally, we believe that apart from the small contradictions between the two experiences, the message that clearly emerges from both studies is that in T1DM celiac serology titer may decrease spontaneously and become persistently negative with a gluten-containing diet and that besides the fact that this may be due to a state of temporary positivity of celiac serology or an epiphenomenon of the autoimmune activation, it is mandatory to be very cautious before prescribing a gluten-free diet in these children.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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