Publication of the Month

Phadia
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November 11/11: Usefulness of deamidated gliadin peptides

Key messages:

- *Screening for anti-DGP IgA and IgG is a promising tool in detecting early stage celiac disease*
- *Anti-DGP IgA and IgG is useful to monitor the compliance with GFD in childhood CD*

Kurppa K, Lindfors K, Collin P, et al

Antibodies against deamidated gliadin peptides in early-stage celiac disease

J Clin Gastroenterol 2011;45:673-8

Background: Early stage celiac disease (CD) is hardly detectable by biopsy and endomysial (EmA) or transglutaminase 2 (anti-tTG) antibodies may also remain negative. The determination of antibodies against deamidated gliadin peptides (anti-DGP) could be a useful tool for diagnosis in such cases and are also important for follow-up.

Summary: In this study the sensitivity of anti-DGP was superior to anti-tTG and comparable to EmA in patients having early-stage celiac disease with normal villous morphology.
Testing for IgA and IgG-class anti-DGP offers important benefits like the detection of monospecific antibodies or IgG-class antibodies in IgA deficient patients.
The results show that CD specific antibodies occur and can be detected before mucosal damage.

Conclusions: This study showed that the combined testing for IgA and IgG-class anti-DGP is a promising new method for case-finding and follow-up in early-stage celiac disease.

Monzani A, Rapa A, Fonio P, et al

Use of deamidated gliadin peptide antibodies to monitor diet compliance in childhood celiac disease

J Pediatr Gastroenterol Nutr 2011;53:55-60

Background: Anti-tTG IgA levels seem to be less reliable than duodenal biopsy in monitoring the compliance with gluten-free diet (GFD) in children with celiac disease. However, the determination of anti-DGPs could be useful to follow-up the diet success.

Summary: During the first year of GFD anti-DGP IgA and anti-DGP IgA+G were found to be reliable tools for monitoring. Both showed a higher sensitivity than anti-tTG and anti-gliadin antibodies IgA in monitoring diet compliance.

Conclusions: Anti-DGP showed to be useful for monitoring the compliance with GFD. Combining anti-DGP IgA and IgG seems to perform better than anti-DGP IgA alone. Nevertheless, anti-DGP did not outperform anti-tTG IgA for CD screening.

Comment: These two articles demonstrate that deamidated gliadin peptide antibodies of the IgA and IgG isotypes are useful markers for diagnosis of early stage CD and for monitoring the compliance with GFD in childhood CD.




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