Human tissue transglutaminase (htTG): a revision of an old blood donor screening!
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In 1996 we conducted a celiac disease (CD) screening study on 2000 American blood donors by using antigliadin IgA and IgG antibodies (AGA) as initial tests followed by antiendomysium antibody test(EmA) on the AGA positive only.

Methods: We retested 500 AGA negative blood donor samples by human tissue transglutaminase test (htTG). The htTG positive samples were further tested for EmA.

Results: We found 10 htTG positives among the 500 AGA negative samples and two of them were positive for EmA.

Conclusion: We can conclude that the first screening study possibly missed subjects with CD and that the real prevalence of CD in USA is higher than those found (1:250) in the study based on the old protocol. Our data also proves that the use of AGA for initial screening is less efficient than the htTG ELISA test.