Is biopsy avoidable on diagnosis of celiac disease?

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A research team from Argentina explored the accuracy of all available serological markers in diagnosing the disorder in the theoretical context of avoiding the invasive intestinal biopsy. They found that the DGP/tTG Screen assay was the best initial test for suspected celiac disease. Combinations of assays might be able to diagnose celiac disease accurately, avoiding biopsy in almost 92 percent of subjects under study.

Diagnosis of celiac disease is based on a characteristic enteropathy in an intestinal biopsy and evidence that these changes are gluten-triggered. The appropriate use of simpler and more accurate tools would add reliability to the diagnosis of celiac disease. Thus, the celiac disease-related serology might have a key role in defining new diagnostic standards for celiac disease.

A research article to be published on July 7, 2010 in the World Journal of Gastroenterology addresses this question. A new diagnostic standard based on serology alone could make intestinal biopsy no longer mandatory for diagnosis of celiac disease. With this purpose in mind, a research team from Argentina aimed to establish the diagnostic performance of several serological tests, individually and in combination, for diagnosing celiac disease in patients with different pretest probabilities and to explore potential serological algorithms to reduce the necessity for biopsy.

This study demonstrates that the DGP/tTG Screen assay could be considered as the best initial test for suspected celiac disease. The

authors also show that combinations of two serology tests, including the DGP/tTG Screen and IgA a-tTG or IgA a-DGP, might be able to diagnose celiac disease accurately in different clinical scenarios, and that they could diagnose or rule out the disorder, obviating the need for duodenal biopsy in more than 92% of individuals in the high- and low-risk populations.

If future studies validate these findings, new diagnostic strategies for celiac disease could be proposed.

More information: Sugai E, Moreno ML, Hwang HJ, Cabanne A, Crivelli A, Nachman F, Vázquez H, Niveloni S, Argonz J, Mazure R, La Motta G, Caniggia ME, Smecuol E, Chopita N, Gómez JC, Maurino E, Bai JC. Celiac disease serology in patients with different pretest probabilities: Is biopsy avoidable? World J Gastroenterol 2010;16(25): 3144-3152. www.wjgnet.com/1007-9327/full/v16/i25/3144.htm