

EDITORIAL

NON CELIAC GLUTEN SENSITIVITY / WHEAT ALLERGY IN ADULT POPULATION WITH INCREASING TRENDS

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Wheat perhaps first cultivated in haven before the human habitat on earth was later migrated to this planet and became the principal component of human food. With the changing time and evolution and increasing world population new technologies used including genetic engineering to incorporate new genes into the wheat seeds to get more wheat crop resulting some change in immunogenic status of the wheat. The prevalence of celiac disease is around 1% worldwide and it appears in younger population. In celiac disease anti gliadin antibodies, transglutaminase antibodies, and specific changes in duodenal and jejunal mucosa appears on histopathology. While in non-celiac gluten sensitivity no such specific biochemical or serological change that could be detected by some test is available.

To implicate wheat as the culprit of the intestinal and non-intestinal symptoms, such as abdominal pain, bloating, altered bowel habits, feeling of indigestion, headache, foggy mind, fatigue, muscular and joint pains is much difficult in the absence of any diagnostic biomarker. Along with gluten there may be other possible implicates such as amylase trypsin inhibitors and wheat germ agglutinins. Celiac disease patients are usually positive for HLA-DQ2 and HLA-DQ8 while the patients with non-celiac gluten sensitivity are negative for HLA-DQ2 and HLA-DQ8.

A decade ago, availability of gluten free products was not common and the patients feel it as stigma to use gluten free diet especially in the public. With the passing time and the availability of gluten free product more easily the acceptability of gluten free diet gradually increased in the last decade. Self-reported gluten sensitivity among non-celiac patients is also very common and the use of gluten free diet in these patients after going through some literature or after consultation with one of the family members or friend on gluten free diet, these patients start using gluten free diet with notable improvement in their intestinal symptoms. For how long such patients should be advised to continue gluten free diet is still not clear as further studies are required.

Majority of the patients with non-celiac gluten sensitivity meet the Rome III criteria of irritable bowel syndrome (IBS) but these patients do not show improvement in their symptoms with the use of various pharmacological agents alone and in combinations unless the addition of gluten free diet. This raises the question whether the symptoms attributed to wheat allergy is something a variant of IBD, IBS, celiac disease or some new entity. To differentiate from other causes the patients who may be negative for HLA-DQ2 and HLA-DQ8 along with negative for serological markers of celiac disease could be pointed out as non-celiac gluten / wheat sensitivity with the help of recently developed HLA-DQ-gluten tetramer blood test.

Non celiac gluten sensitivity / wheat allergy, self-reported or diagnosed is a worldwide phenomenon with approximated prevalence of 10% having variety of intestinal and extra intestinal symptoms poses a diagnostic and therapeutic challenge. It needs to develop serological and biochemical tests to establish its underlying offending agent, its pathogenicity and the use of long term gluten free diet with the help of further studies.

CONFLICT OF INTEREST

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