Celiac Disease: An Autoimmune Disorder

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A R T I C L E I N F O

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Celiac disease is an autoimmune disease that is triggered due to the ingestion of a protein called gluten that is naturally present in many cereal grains. Inadequate response of both the adaptive as well as the innate immunity to gluten in genetically susceptible people is involved that leads to the enteropathy of the intestine, thus damaging the intestinal mucosa that leads to malabsorption of different nutrients. It is one of the most common disorders, however many cases are not identified and are left untreated. The occurrence of Celiac disease involves a triad of genes, exposure to gluten and other environmental factors such as gastrointestinal tract infection during infancy or any other early life factor that influences the intestine. Wide range of symptoms are reported in patients that are classified as gastrointestinal and non-gastrointestinal symptoms ranging from abdominal pain, bloating, diarrhea, vomiting, anemia to complications such as osteoporosis, neurological abnormalities and hepatitis. There are different tests that can be used for the diagnosis of celiac disease, these are known as serological tests that include Antigliadin antibodies, Antiendomysial antibodies, Anti tissue transglutaminase antibodies and HLA typing. The most important aspect of this disease is its proper management through diet and counselling of the patient as it's a lifelong diet. Gluten free diet should be recommended to patients in which they are supposed to avoid any product containing gluten such as wheat, rye, barley, instead alternatives such as corn, flax and quinoa should be used to made different products. The amount of processed and packaged foods also needs to minimized, lactose containing products such as milk and other dairy products need to be avoided as a celiac disease patient becomes lactose intolerant during the initial stages of diagnosis. Due to malabsorption of nutrients, a diet rich fat soluble vitamins and folic acid should be consumed as these micronutrients are the most effected and not absorbed. Moreover, foods that are a rich source of high bioavailable iron such as meat, poultry and fish should be consumed to prevent anemia. For the better implementation of this diet and lifestyle, proper nutrition education should be provided to the patient and his family regarding the disease, its causes, complications and proper management.