



Celiac Disease

Celiac disease is a small bowel disease that interferes with the absorption of food nutrients (malabsorption). The bowel is unable to tolerate gluten, which is a protein in wheat, barley, rye and in smaller amounts, oats. When the bowel is exposed to gluten, an immunology reaction occurs within hours. The body makes antibodies such as antigliadin, anti-endomysial and anti-tissue transglutaminase that may cause damage to the lining of the small bowel.

The symptom of the disease varies from person to person. The most common symptoms in children include abdominal pain, bloating, diarrhea, vomiting, fatigue, and weight loss. Children may also have delayed growth and development. Adults are less likely to have digestive symptoms. They may present with iron-deficiency anemia, fatigue, depression, bone or joint pain, numbness of hands or feet, infertility or recurrent miscarriage, or a rash on the knees, elbows or buttocks called dermatitis herpetiformis.

Celiac disease has also been associated with other autoimmune diseases such as diabetes, rheumatoid arthritis, Hashimoto's thyroiditis and Sjogren's syndrome (dry eyes and mouth).

Celiac disease occurs mainly in Caucasians. The incidence is low in African-Americans and Asians. In the United States, it is estimated that 1 in 133 people will have celiac disease. Ten percent of first-degree relatives of celiac disease will develop the disease.

Celiac disease diagnosis can be challenging because it mimics other diseases. The antibody blood tests (IgA antihuman tissue transglutaminase TTG and IgA endomysial antibody immunofluorescence EMA) are often positive if the patient has not been on a gluten free diet but may also be negative. The definitive diagnosis is made with a biopsy of the small intestine.

A gluten free diet controls the symptoms of Celiac disease in greater than 90% of patients. Some patients may need additional medication or elimination of other dietary proteins if a gluten free diet is not successful. Consultation with a dietician is strongly recommended to identify foods that contain gluten.

Resources:

National Institutes of Health Celiac Disease Awareness Campaign: www.celiac.nih.gov/

Celiac Disease Foundation: www.celiac.org

Celiac Disease and Gluten-Free Support Center: www.celiac.com

American Celiac Disease Alliance: www.americaneliac.org

Celiac Sprue Association/USA Inc.: www.esaceliacs.org

Gluten Intolerance Group of North America: www.gluten.net

National Foundation for Celiac Awareness: www.CeliacCentral.org

American College of Gastroenterology information sheet:

<http://www.acg.gi.org/patients/gihealth/pdf/celiac.pdf>