Celiac Disease: Underdiagnosed and Gluten’s Worst Enemy

While mingling with other professionals at a New Jersey Young Professionals Mixer, I met someone with celiac disease and he was immediately intrigued by my professional background. He told me he has celiac disease and celiac disease awareness month happens to fall in October! So, in dedication to my fellow colleague, I would like to arrange this article in a celiac disease question & answer format to equip pharmacists with information about celiac disease, thereby educating their patients and raising awareness.

What is celiac disease?
Celiac disease is an autoimmune response to eating anything that contains gluten - a protein found in wheat, barley, and rye. About 1 in 141 Americans have celiac disease, but over 80% of cases continue undiagnosed.

What causes celiac disease?
In patients with celiac disease, the main autoimmune target is the patient’s villi; the villi either shrinks or becomes damaged (as shown on the right), thereby making the body unable to take in nutrients for proper health and growth.

Who is at a greater risk for celiac disease?
Patients with:
- Autoimmune disorders such as Type 1 Diabetes
- A family history of celiac disease or dermatitis herpetiformis (an itchy rash full of blisters found in patients with celiac disease)
- Down syndrome or Turner syndrome
- The HLA-DQ2 gene (present in 95% of cases) or HLA-DQ8 gene (present in 5% of cases)

What are some signs and symptoms of celiac disease?
Unfortunately, celiac disease presents with differing signs and symptoms. The most common symptoms that children have includes malabsorption, diarrhea, swollen belly, gas, and weakness

Many adults have minimal or no gastrointestinal symptoms but present with atypical manifestations, such as fatigue, depression, and Iron-deficiency anemia.

What tests are conducted in order to confirm a proper diagnosis of celiac disease?
Blood tests are ordered to determine if there is an autoimmune response to gluten, namely with IgA. If blood test results suggest celiac disease, doctors may perform an endoscopy and perform a biopsy of intestinal mucosa to confirm diagnosing patients with celiac disease.
What are some treatment options and lifestyle changes patients with celiac disease can pursue?

The cornerstone to celiac disease is a gluten-free diet, which means eliminating all foods containing wheat, barley, and rye. Consulting a Registered Dietician is highly recommended in order to incorporate gluten-free alternatives, reduce symptom severity, and improve nutritional ingestion.

For patients with nutritional deficiencies, a multi-vitamin is highly recommended to correct vitamin, mineral, or nutrient deficiencies.

Additionally, due to intestinal inflammation and damage, intravenous or oral corticosteroids may be prescribed to reduce inflammation.

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RESOURCES


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