

CELIAC DISEASE DIAGNOSIS IN ADULTS

Celiac disease (CD) may be suspected in

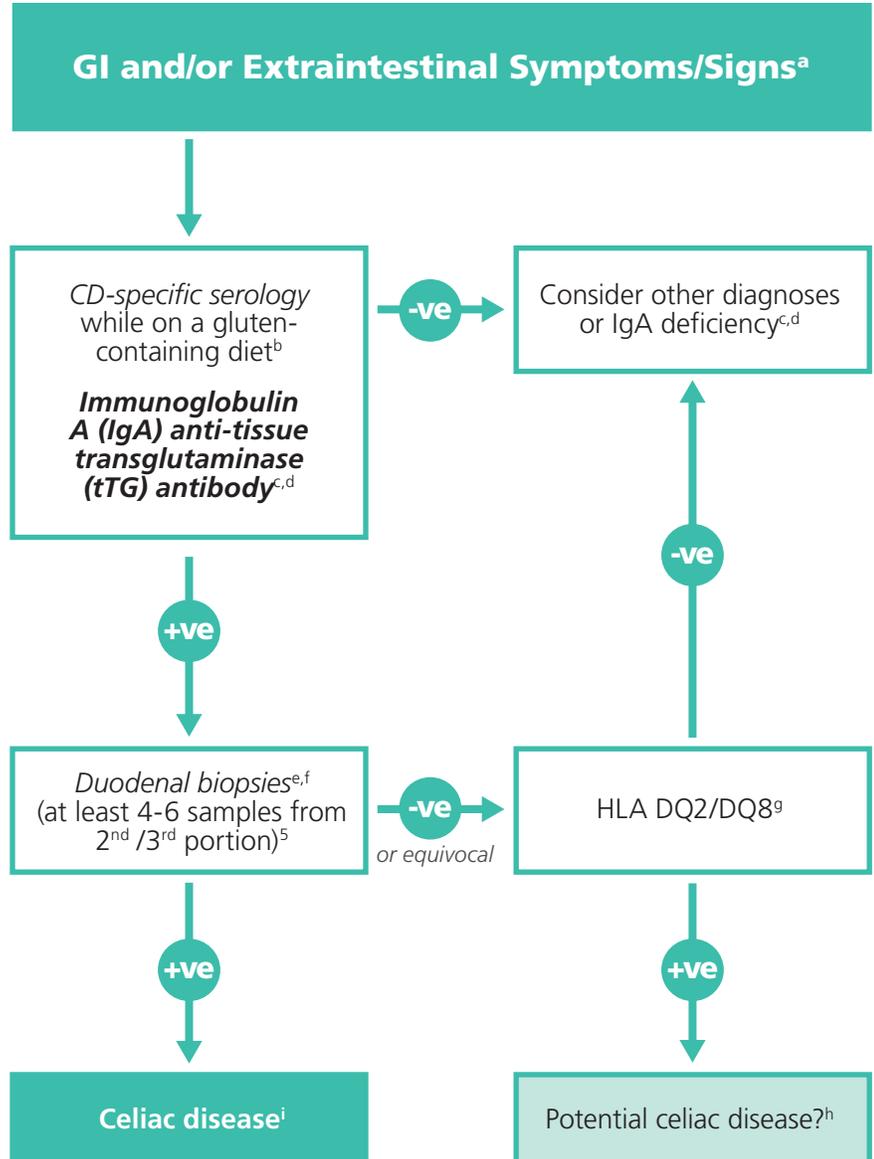
1. Symptomatic patients with

- Gastrointestinal symptoms/signs: diarrhea¹⁻⁵, weight loss¹⁻⁵, gas/bloating¹⁻⁵, constipation^{1,5} (more commonly in children)¹, hypertransaminasemia^{1,3,5}
- Extraintestinal symptoms/signs: iron deficiency anemia^{1,3}, dermatitis herpetiformis¹⁻⁴, osteoporosis and neuropsychiatric conditions, such as neuropathy or ataxia¹

2. Patients with associated conditions^a

- Type 1 diabetes mellitus^{1,3-5}
- Autoimmune thyroiditis^{1,3-5}
- Other autoimmune conditions^{1,4,5}
- Down syndrome^{1,3-5}

3. First-degree family members of celiac patients^{a, 1-5}



Abbreviations

IgA tTG Immunoglobulin A anti-tissue transglutaminase antibody

+ve positive

-ve negative

HLA DQ2/DQ8 Human leukocyte antigen; genetic predisposition for celiac disease

GI gastrointestinal

a. Screening for celiac disease in high-risk asymptomatic populations is controversial due to unknown natural history and potential benefits^{2,4}.

b. If patient self-started a gluten-free diet, consider testing after challenge with >3 g of gluten per day (equivalent to 1-2 slices of bread per day) for at least 2 weeks⁴.

c. The addition of total IgA is useful to detect IgA deficiency^{3,5}.

d. An alternative approach is to include both IgA and IgG-based testing, such as IgG-deamidated gliadin peptides (DGPs)^{4,5}.

e. There is scarce data using serology alone for diagnosis of CD.⁴ Combined use of biopsy and serologic analyses for the diagnosis of celiac disease is recommended in adults¹.

f. Current guidelines recommend 1-2 biopsies from the bulb in addition to at least 4 biopsies from distal duodenum^{3,6}. However, the advantages (increased sensitivity) and disadvantages (reduced specificity) of bulb biopsies are under scrutiny.

g. HLA DQ2/DQ8 negative excludes CD in majority of cases^{1,3-5}.

h. Other reasons for discrepant serology and biopsies include reduced gluten in the diet, inadequate biopsy sampling, and lack of expert histopathology reporting.

i. Celiac disease diagnosis is confirmed after clinical and/or histology improvement after gluten-free diet.

REFERENCES

1. Shannahan et al. *Gastrointest Endosc Clin N Am*. 2017;27(1):79-92.
2. Chou R, et al. *JAMA*. 2017;317(12):12581-1268.
3. Rubio-Tapia A, et al. *Am J Gastroenterol* 2013; 108:656-676
4. Kelly CP. *Gastroenterology* 2015; 148:1175-1186
5. Bai J World Gastroenterol Organization Guidelines 2016.
<http://www.worldgastroenterology.org/guidelines/globalguidelines/ celiacdisease/ celiacdiseaseenglish>
6. Green PHR. *Gastroint endoscopy* 2008; 67(7): 108-890.



NORTH AMERICAN SOCIETY
FOR THE STUDY OF
CELIAC DISEASE

www.nasscd.org