U.S. Preventive Services Task Force
Literature Surveillance Report

Title: Screening for Celiac Disease
Literature surveillance date: May 2024

Recommendation summary: In 2017, the USPSTF concluded that the current evidence was insufficient to assess the balance of benefits and harms of screening for celiac disease in asymptomatic persons (Grade: **I statement**). This recommendation applies to adults, adolescents, and children.

Research Gaps from Previous Task Force Review: The 2017 recommendation statement was based on a systematic review with a search through June 2016. The Task Force identified important gaps and recommends research on the following:

- The effectiveness of screening for celiac disease in asymptomatic adults, adolescents, and children with regard to morbidity, mortality, or quality of life;
- The effectiveness of targeted screening in persons at increased risk for celiac disease;
- The accuracy of screening tests in asymptomatic persons, particularly those with risk factors;
- The effectiveness of treatment of screen-detected, asymptomatic celiac disease to improve morbidity, mortality, or quality of life compared with no treatment or treatment after clinical diagnosis; and
- The harms of screening for or treatment of celiac disease.

Summary of New Evidence: Literature scans conducted in the MEDLINE and PubMed databases and the Cochrane Library were limited to English language, core and specialty journals, 2016 to present.

Two new studies address the effect of screening for celiac disease. The US-based Autoimmunity Screening for Kids (ASK) study screened 9,973 children aged 1-17 years for celiac disease and type 1 diabetes simultaneously.[1] This study is ongoing; followup of children diagnosed with celiac disease will evaluate symptoms, growth parameters, quality of life, and mental health to inform the potential benefits and harms of mass screening. A 2018 study administered a questionnaire to 236 adult celiac patients in Finland who had been diagnosed in childhood.[2] The study reports differences in current self-reported health, health concerns, quality of life, and dietary adherence between patients diagnosed by screening and patients diagnosed due to clinical suspicion.

Seven studies report on the accuracy of serum tests to detect celiac disease, including four in children,[3-6] two in adults,[7,8] and one in children and adults.[9] Studies took place in the US,[7] Canada,[9] Israel, [3,5] and the UK.[4,6,8] Two studies are in asymptomatic patients,[6,9] four include both symptomatic and asymptomatic patients,[3,4,7,8] and one does not report patients' symptom status.[5]

Three new publications address the treatment of celiac disease with a gluten-free diet. Two RCTs screened asymptomatic patients with type 1 diabetes for celiac disease and randomized those who tested positive to a gluten-free or regular diet. An Indian trial (n=320 screened, 30 randomized) reports on hypoglycemic episodes, HbA1c, height (in pediatric participants), weight, serum nutrient levels, bone mineral content and density after one year.[10] One publication from a large Canadian trial, CD-DIET (n=2,387 screened, 52 randomized), reports health-related quality of life, adherence, and self-perceived wellness after 12 months;[11] another publication for CD-DIET reports HbA1c and adverse events.[12]

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