

Coeliac disease and risk of bacterial blood infections

In a study published in the February issue of the highly respected medical journal "The Gut", ("Coeliac disease and risk of sepsis." Gut. 2008 Feb 12, Epub), Swedish researchers led by JF Ludvigsson examined the risk of subsequent sepsis in adult and pediatric individuals just diagnosed with celiac disease (CD).

They identified more than 15,000 individuals with a diagnosis of CD between 1964-2003 and the same number of control individuals. They then applied statistical criteria to determine if CD patients developed more blood infections than controls (either patients admitted in the hospital or general population at large).

Thus, they were able to show that individuals with CD were indeed at increased risk of bacterial blood infections. The highest risk estimates were seen for pneumococcal infections (Pneumococcus is a specific microorganism responsible also for pneumonia and meningitis). Interestingly, the CD patients diagnosed in childhood were not at increased risk of subsequent sepsis compared with the controls.

What are the reasons for this modest but clear higher risk of bacterial blood infections in adult celiac patients?

We can only speculate on 3 possible causative factors:

- 1) hyposplenism (a reduction of the spleen size and function often found in CD at the time of diagnosis, that may induce a temporary impairment of immunity);
- 2) increased mucosal permeability (a condition that is commonly present in CD at diagnosis and may lead to translocation of bacteria from the gut into the bloodstream); and
- 3) an altered composition of the intestinal glycocalyx (a film of mucus that is present on the gut and impedes bacterial translocation).

Bottom Line: Worth remembering: the increased risk only applies to CD before beginning their gluten-free diet!!

Stefano Guandalini, M.D.

Title:

Coeliac Disease and risk of sepsis

Source: <http://www.ncbi.nlm.nih.gov/pubmed/18270242>

Posted: March 1, 2008