

Abstract

Celiac disease is a chronic inflammatory disorder affecting the small bowel. It develops in genetically susceptible individuals upon yet unknown environmental stimuli. Environmental triggers such as infections, dietary change or other “hits” are clearly required for disease development, as only a tiny fraction of genetically susceptible subjects develops celiac disease upon gluten exposure. This thesis aims to summarize the current evidence on viruses in the pathogenesis of celiac disease regarding their relevance in population or their involvement in immune processes leading to celiac disease. Rotavirus, orthoreovirus, adenovirus, astrovirus, respiratory syncytial virus, hepatitis viruses and herpesviruses are discussed. In addition, prospective cohort studies are presented that investigate environmental triggers of type 1 diabetes and celiac disease, two diseases sharing genetic predispositions.

Keywords:

celiac disease, orthoreovirus, rotavirus, adenovirus, astrovirus, respiratory syncytial virus, hepatitis C virus, hepatitis B virus, prospective cohort study