

Celiac Disease and Chronic Hepatitis C Virus Infection – Prevalence Studies

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Abstract The association of celiac disease with chronic hepatitis C virus infection was intensely debated. We aimed to study the prevalence of celiac disease in patients with chronic hepatitis C virus infection.

Keywords: celiac disease, hepatitis C, prevalence

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Association between celiac disease and chronic hepatitis C virus infection has been reported in many studies [1,2]. We want to see in this editorial the prevalence of celiac disease in patients with hepatitis C. Lindgren et al reported that celiac disease has a prevalence of 1.5% in patients with chronic liver disease, which is higher than in general, however this could be explained by the fact that celiac disease was often described as underdiagnosed [1]. A study on 259 patients revealed that there is a higher prevalence of anti-gliadin antibodies in patients with liver disease such as chronic hepatitis C virus, autoimmune liver disease, and other hepatic diseases than in controls [2]. Moreover, the correlation between celiac disease and chronic hepatitis C virus could consist in the silent activation of celiac disease during interferon treatment which is often unsuspected due to the fact that interferon can lead to the induction of pre-existent autoimmune disorders [3]. In literature have been reported several cases of celiac disease onset during interferon therapy [4-7]. However, Mbbs et al published a series of four cases of celiac disease onset in patients with chronic hepatitis C virus that did not undergo interferon

and ribavirin therapy [8]. A study on 210 patients with chronic hepatitis C virus revealed that the prevalence of celiac disease among chronic hepatitis C virus patients is 0%, while the prevalence of chronic hepatitis C virus on 194 celiac disease patients is 1.54% comparable with the general population, furthermore there is a lack of correlations between PEG interferon- α and celiac disease [9]. Ruggeri et al concluded that the prevalence of anti-endomysial antibodies in chronic hepatitis C virus patients is independent with autoimmunity [10]. Another study on 120 patients with portal hypertension revealed the fact that celiac disease has a higher prevalence in patients with cryptogenic chronic liver disease (10%) and idiopathic noncirrhotic intrahepatic portal hypertension (14%) than in hepatitis B/C-related cirrhosis (0%) [11]. Studying Table 1 we can conclude that in no study the prevalence of celiac disease in chronic hepatitis C virus patients is higher than the global prevalence of chronic hepatitis C virus (2.5%) [12]. The prevalence of celiac disease in chronic hepatitis C virus patients is summarized in Table 1. In conclusion, we can observe that the prevalence of celiac disease in chronic hepatitis C virus patients is decreasing over time.

Table 1. Prevalence of CD and auto-antibodies in HCV patients

Number of HVC patients	Prevalence of CD %	Antibody			Country	Year	Author
		AGA	TGA	EMA			
327*	1.5	6%	-	-	Sweeden	1994	Lindgren et al [3]
259	1.2	32%	1.2%	1.2%	USA	2001	Fine et al [4]
534	1.3	-	1.3%	-	Italy	2004	Durante-Mangoni et al [5]
100	0	-	1%	0%	Italy	2005	Villalta et al [15]
624	0	5,7%	-	0.16%	France	2007	Thevenot et al [16]
244	1.2	-	-	2%	Italy	2008	Ruggeri et al [12]
195	0	-	1%	0%	USA	2008	Hernandez et al [17]
21	-	-	9%	-	Cuba	2012	Sarmiento et al [18]
210	0	-	0%	0%	Italy	2012	Gravinal [19]
66	-	-	0%	5,8%	Brasil	2013	Marconcini et al [20]

*- 327 patients with chronic "cryptogenic" liver disease.

Conflict of Interest

All authors contributed equally to this work.

All authors of this paper have read and approved the final version submitted.

The authors have declared that no conflict of interest exists.

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