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Celiac disease screening in patients with cryptogenic cirrhosis

Narciso-Schiavon JL *et al.* Celiac disease and cryptogenic cirrhosis

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Abstract

We write a letter to the editor commenting the article by Singh *et al*^[1]. We discuss the present literature on cirrhosis and celiac disease and recommend screening and treating celiac disease in individual with cryptogenic cirrhosis.

Key Words: Celiac disease; Liver cirrhosis; Liver failure; Aspartate aminotransferase; Alanine aminotransferase

Narciso-Schiavon JL, Schiavon LL. Celiac disease screening in patients with cryptogenic cirrhosis. *World J Gastroenterol* 2022; In press

Core Tip: We discuss reasons for recommendation of celiac disease screening in patients with cryptogenic cirrhosis.

TO THE EDITOR

We read with interest the article by Singh *et al*^[1]. Liver cirrhosis is a disease with potential morbidity, which can progress to decompensation, hepatocellular carcinoma and death. A high proportion (9.15%) of patients with cryptogenic hypertransaminasemia is affected by asymptomatic celiac disease^[2]. It has been proposed that the hepatic manifestation of CD is a nonspecific chronic hepatitis^[3], called

by some authors celiac hepatitis^[4]. A higher prevalence of celiac disease has been demonstrated in individuals with autoimmune hepatitis^[5], and anti-actin antibodies may be present in both diseases, as they are reliable for the diagnosis of type-1 autoimmune hepatitis^[6] and can also be associated with severe intestinal mucosa damage in celiac disease patients^[7]. This could support an immunological link between celiac disease and liver injury. Despite these findings, it is not known for sure whether liver disease associated with celiac has the potential to progress to liver cirrhosis, although celiac disease is twice as common in individuals with cirrhosis of the liver as in the general population^[8,9]. In this sense, studies suggest that celiac disease can be a cause of cryptogenic cirrhosis^[10,11]. Most importantly, it has been reported that a gluten-free diet (GFD) treatment can reverse the decompensation of cirrhosis and remove the patient from liver transplantation waiting list^[12-14]. Joshi *et al*^[9] evaluated 84 patients with chronic liver disease, and 13% were diagnosed with celiac disease. An improvement in liver function tests and Child-Pugh score was observed after GFD treatment. Demir *et al*^[10] reported five cases of children with cryptogenic cirrhosis and celiac disease. Treatment with GFD led to clinical and biochemical improvement, followed by a decrease in liver and spleen size. The most important sample was reported by Wakim-Fleming *et al*^[8]. They have evaluated 204 patients with biopsy proven cirrhosis of different causes, and 2.5% were diagnosed with celiac disease. After a GFD, patients with CD showed a return to normal levels of their celiac antibodies, small bowel biopsy and liver enzymes, and none received a liver transplant^[8]. The European Society for the Study of Celiac Disease states that patients with unexplained elevation of liver enzymes should be assessed for celiac disease and recognizes that CD can be associated with severe liver disease and even liver failure^[15].

For the aforementioned reasons, and because liver cirrhosis has a high potential for morbidity and mortality, we recommend screening and treating celiac disease in individuals with cryptogenic cirrhosis^[16]. And one should consider screening for celiac antibodies in patients with decompensated cirrhosis on the liver transplantation waiting list, whatever are the mechanisms involved in the deterioration of liver function.

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