# World Journal of Gastroenterology

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#### **ABOUT COVER**

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LETTER TO THE EDITOR

# Celiac disease screening in patients with cryptogenic cirrhosis

Janaina Luz Narciso-Schiavon, Leonardo Lucca Schiavon

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#### **Abstract**

We write a letter to the editor commenting the article "Who to screen and how to screen for celiac disease". We discuss the present literature on cirrhosis and celiac disease (CD) and recommend screening and treating CD in individuals with cryptogenic cirrhosis.

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

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

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### 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 (CD)[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 CD 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 CD patients[7]. This could support an immunological link between CD 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 CD is twice as common in individuals with cirrhosis of the liver as in the general population [8,9]. In this sense, studies suggest that CD can be a cause of cryptogenic cirrhosis [10,11]. Most importantly, it has been reported that a glutenfree 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 CD. 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 CD. Treatment with GFD leaded 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 CD. 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 CD and recognizes that CD can be associated with severe liver disease and even liver

For the aforementioned reasons, and because liver cirrhosis has a high potential for morbidity and mortality, we recommend screening and treating CD 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.

### **FOOTNOTES**

Author contributions: Narciso-Schiavon JL and Schiavon LL designed the research; Narciso-Schiavon JL wrote the paper; and Schiavon LL reviewed the manuscript.

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