

Liver Abnormalities Observed in Algerian Celiac Population

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Abstract

Introduction: Liver abnormalities are more frequently associated with celiac disease than in the general population. The aims of our study are to report the prevalence of liver diseases during CD and to describe the characteristics, etiologies and response to gluten free diet of these liver disorders.

Patients and Methods: A prospective multicentric study including 154 celiac patients in whom hepatic abnormalities were investigated with an etiologic assessment. The evolution of liver disorders after gluten free diet was assessed.

Results: The prevalence of hepatic disorders in celiac patients was 18.1%. The diagnosis cryptogenetic hypertransaminasemia is retained in 12.3% of cases (19/154), hepatic cirrhosis is associated with CD in 5.8% of cases, the cirrhosis was cryptogenetic in 55.5% (5/9) of cases and secondary to an autoimmune origin in 44.5% (4/9). A GFD is established in addition to the specific management of liver cirrhosis. Liver tests were standardized in 100% of patients with cryptogenetic transaminasemia followed GFD. The chronic liver disease was often decompensated and the hepatic signs for cirrhosis were in the foreground masking the response to GFD.

Conclusion: It is recommended to look for hepatic abnormalities during CD and even to think of the diagnosis of CD in front of liver cytolysis syndrome and in the presence of liver diseases.

Keywords: *Celiac Disease; Liver Abnormalities; Cryptogenetic Hypertransaminasemia; Autoimmune Hepatitis; Cirrhosis; Gluten Free Diet*

Abbreviations

CD: Celiac Disease; GFD: Gluten-Free Diet

Introduction

Celiac disease (CD) is a gluten-sensitive enteropathy that requires a lifetime gluten-free diet (GFD). It's now considered as multisystem disorder. A number of studies have shown the occurrence of liver abnormalities at a higher frequency in patients with CD compared with that in the general population. Cryptogenetic hypertransaminasemia is observed in about half of celiac patients not following GFD with reversibility in the majority of cases after 6 to 12 months of GFD [1]. Other liver abnormalities such as autoimmune hepatitis, cholestatic liver diseases, cirrhosis can be observed.

Aim of the Study

The aims of our study are to report the prevalence of liver abnormalities during CD and to describe the characteristics, etiologies and response to GFD of these liver disorders.

Patients and Methods

Prospective multicentric study including 154 celiac patients (42 M; 112 F); middle age was 36,1 years \pm 13,6, patients were recruited over a period of 18 months: 01-01-2013 to 30-06-2014 and followed at least over a period of 12 months. Hepatic abnormalities were investigated with an etiologic assessment. The evolution of liver disorders after GFD was assessed.

Results

The prevalence of hepatic disorders in celiac patients was 18.1% (28/154).

Any etiology of hypertransaminemia was found in 12.3% of cases (19/154), the diagnosis of cryptogenetic hypertransaminase is retained after a negative etiological assessment of hepatic cytolysis in patients at a diagnosis of CD.

Severe hepatic pathologies were associated with CD in 5.8% (9/154) of cases; these hepatic pathologies were in almost all cases at the stage of hepatic cirrhosis.

Cirrhosis was cryptogenetic in 55.5% (5/9) of cases and secondary to an autoimmune origin in 44.5% (4/9).

Chronic hepatopathy revealed CD in 1.9% of the celiac population (3/154): two cases of autoimmune cirrhosis, one associated with pituitary insufficiency, and one case of cryptogenetic cirrhosis.

The diagnosis of cirrhosis has preceded the diagnosis of CD in 55.6% (5/9) of cases, was contemporary and revealing the CD in 33.3% (3/9) of cases and in a single case (11.1%, 1/9), the diagnosis of cryptogenetic cirrhosis was made 7 years after the diagnosis of CD, in a celiac patient diagnosed of CD in childhood. This patient was not following the GFD. We notice that cirrhosis occurred in the celiac population at a young age, on average 31 years.

Cirrhosis is most often complicated (77.8%).

Specific management of hepatic cirrhosis has been established with ligation of esophageal varices in 2 patients after bleeding esophageal varices until eradication of varices.

Characteristics of liver diseases

| Signs | Cryptogenetic cirrhosis (n = 5) | Autoimmune cirrhosis (n = 4) | Total (n = 9) |
|-------------------------------|---------------------------------|------------------------------|---------------|
| Jaundice | 1 | 0 | 1 |
| Hepatomegaly | 1 | 0 | 1 |
| splenomegaly | 4 | 1 | 5 |
| ascites | 2 | 3 | 5 |
| Edema of the lower limbs | 1 | 2 | 3 |
| Cytolysis syndrome | 2 | 2 | 4 |
| Cholestasis syndrome | 2 | 1 | 3 |
| Esophageal varices | 3 | 3 | 6 |
| Hypertensive gastropathy | 5 | 2 | 7 |
| Ruptured esophageal varices | 1 | 1 | 2 |
| Hepato-cellular insufficiency | 3 | 3 | 6 |
| Decompensated cirrhosis | 4 | 3 | 7 |

A treatment with β blockers was prescribed in primary prophylaxis of digestive bleeding by rupture of oesophageal varices in 4 patients. Diuretic therapy and in cirrhotic patients with ascites.

A GFD is established in addition to the specific management of liver cirrhosis. Liver tests were standardized in 100% of patients with cryptogenetic transaminasemia followed GFD. The chronic liver disease was often decompensated and the hepatic signs for cirrhosis were in the foreground masking the response to GFD.

Conclusion

It is recommended to look for hepatic abnormalities during CD and even to think of the diagnosis of CD in front of liver cytolysis syndrome without obvious etiology and in the presence of a chronic cryptogenetic or dysimmune liver diseases.

Bibliography

1. Rostami-Nejad M., *et al.* "The role of celiac disease in severity of liver disorders and effect of a gluten free diet on diseases improvement". *Hepatitis Monthly* 13.10 (2013): e11893.

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