THE RELATION BETWEEN INTESTINAL FATTY ACIDS BINDING PROTEIN-2 AND CHRONIC USE OF PROTON PUMP INHIBITORS IN DECOMPENSATED CIRRHOSIS

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Introduction

Liver cirrhosis is a global issue that affects people of all ages, genders, and ethnicities, In the world, it is the 14th most prevalent cause of mortality in adults , ranking 4th in Europe and 9th in the United States.

The connections between the gut and liver have given rise to the phrase "gut-liver axis." This axis could be disturbed in decompensated cirrhosis with increase intestinal permeability.

Recent research has identified medications use as one of the most significant contributors to the disruption of the composition of the gut microbiota and gut-liver axis failure. Example of these medications includes proton pump inhibitors (PPIs).

Aim of the work

The aim of the study was to measure IFABP2 as a diagnostic marker for gut wall integrity in decompensated cirrhosis. Moreover, its relationship with chronic use of PPIs in cirrhosis.

Patients and Methods

This study was carried out on 75 candidates (32 females & 43 males) at Tropical medicine Department of Alexandria university. Subjects were categorized into 3 groups; group I (n=30) with compensated liver cirrhosis, group II (n=30) with hepatic decompensation which were subdivided into Group IIa (n=15) with chronic use of PPIs and Group IIb(n=15) without chronic use of PPIs, and group III (n=15) healthy controls. IFABP2 was measured by ELISA.

Results

Plasma IFABP2 levels in decompensated cirrhotic patients were statistically significantly higher than in compensated cirrhotic patients and the control group (p value < 0.001, p value < 0.001). However, there was no statistically significant difference between the compensated patients and control groups (p value= 0.969).

Plasma IFABP2 levels in chronic users of proton pump inhibitors were significantly higher than Non-chronic users of PPIs and the control group (p value = 0.001, p value < 0.001).

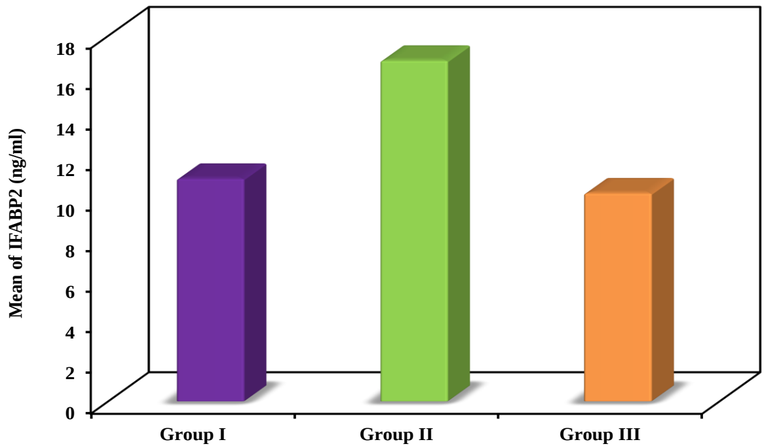

Figure (1): Comparison between the three groups according to IFABP2

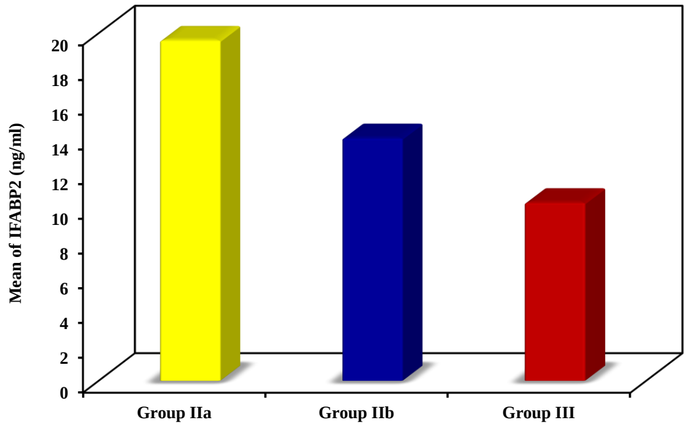

Figure (2): Comparison between the two subgroups and control according to IFABP2

Conclusion

Elevated levels of plasma IFABP2 in decompensated cirrhotic patients specially with chronic use of PPIS could propose their use as diagnostic markers for gut wall integrity in these patients.So we recommend further studies to confirm the relation between IFABP2 and PPIs use in decompensated cirrhosis.