

CO-ORGANIZED EVENT

5th World Congress on **Hepatitis & Liver Diseases**
&
2nd International Conference on **Pancreatic Cancer & Liver Diseases**
August 10-12, 2017 London, UK

Serum leptin and ghrelin concentrations in chronic hepatitis C genotype-4 patients with steatosis: their effect on the response to antiviral therapy

H Hakim, M Abd El Gawad, M Elrakhawy and E El Masry
Mansoura University, Egypt

Background: Recent evidences identified various adipokines and gut hormones as relevant modulators of the pathophysiology of liver fibrosis and steatosis progression. We assessed whether serum leptin and ghrelin concentrations are associated with response to antiviral treatment or not.

Participants & Methods: This study was conducted on 50 patients with CHC genotype-4 and steatosis and 25 age-matched healthy participants as a control group. Patients were treated with Peg-interferon and ribavirin for 48 weeks, independent of virologic response. Serum HCV-RNA concentrations were measured before the initiation of treatment and at weeks 12, 24 and 48 during the treatment. The genotype was determined using INNO-LiPA HCV assays, and serum leptin and ghrelin concentrations were measured using ELISA. Biopsy specimens were scored according to the Ishak system, and steatosis was graded as mild, moderate or severe.

Results: We found serum leptin levels tend to increase ($P=0.023$), whereas plasma ghrelin levels tend to decrease ($P=0.004$) as the grade of steatosis worsens. Plasma ghrelin at baseline showed significant negative correlations with insulin resistance and leptin. However, we did not find any correlations between leptin, ghrelin, insulin resistance, hepatic fibrosis and hepatic steatosis with viral load. Sustained virological response (SVR) was achieved in 28 patients (56%) and was associated with a lower grade of liver steatosis ($P=0.013$), milder fibrosis ($P=0.002$), low value of insulin resistance ($P=0.001$), lower leptin levels ($P=0.005$), and higher ghrelin levels ($P=0.001$), whereas patients who did not achieve SVR (nonresponse) had significantly higher leptin and lower ghrelin concentrations at baseline, with significant difference as the severity of steatosis worsened.

Conclusion: Increased serum leptin before treatment may predict non-SVR, whereas increased ghrelin may predict SVR.

hzhzhkhk@yahoo.com

Notes: