

SUMMARY

Hepatitis C virus is a serious worldwide problem which has a great impact on health status in the field of liver diseases with an estimation of 170 million people infected worldwide.

This study has been conducted at the National Hepatology and Tropical Medicine Research Institute (NHTMRI) and Gastroenterology and Hepatology Department, Banha University hospital on 60 chronic HCV naive patients.

The age of recruited patients was above 18 and below 60 years, they were HCV antibody and RNA positive with elevated ALT level and compensated liver disease.

These patients received antiviral treatment in the form of pegylated interferon alpha 2b (100 µg once weekly) with ribavirin (800-1000 mg/d) based on the body weight (<70kg or >70kg respectively).

The objective of the present study was to evaluate the effect of glucose abnormalities as an independent risk factor on non response to peg-interferon therapy in chronic HCV patients.

All the patients were subjected to history taking, clinical examination, complete biochemical and virological studies in addition to abdominal ultrasonography. Liver biopsy was done before treatment in all patients.

The diabetic patients has a significant higher level of mean insulin resistance than other 2 groups (normoglycemic and impaired fasting glucose level groups).

A sustained response was considered when undetectable HCV RNA in serum was achieved at the end of treatment and at the end of 6 months of follow-up following the cessation of antiviral therapy (SVR).

In present study, normoglycemic patients were 20pts, impaired fasting glucose level patients were 20pts, type 2 diabetic patients were 20pts, 52 male pts and 8 female pts with their ages from 25y to 55y.

Concerning the pretreatment elevations of aminotransferases (ALT and AST), there was no significant results.

Histopathological examination of liver biopsies revealed that a large proportion of patients (61%) had mild degree of inflammation, and the majority of them (77%) had early fibrosis stages (stages 1, 2 and 3) (according to Modified Knodell score).

When the present study evaluated the virological responses of the studied patients 3 months after treatment of antiviral therapy (12 week), it was found that the number of patients who showed negative HCV RNA (SVR) was 57 patients (95%) while those who were considered to be non responders were only 3 patients (5%).

The diabetic patients who were included in the study (20)pts has a significant higher level of mean insulin resistance than other 2 groups (normoglycemic and impaired fasting glucose level groups).

Insulin resistance can act as an independent risk factor in non response to treatment of chronic hepatitis c patients with interferon and ribavirin but with low significance due to the limited number of patients in the present study; However, it must be taken into consideration the limited number of enrolled diabetic patients in the study as the control of diabetes was one of the inclusion criteria.