English Summary

<u>Summary</u>

This study was conducted in order to observe the serum resistin level in patients with a chronic HCV infection and to evaluate the effect of resistin on the clinical picture of the disease. To fulfill the aim of this study, 36 patients with a chronic HCV infection were studied as well as a control group of 16 individuals. Every patient was subjected to the following:

- 1-Thorough history taking
- 2-Full clinical examination with emphasis on the presence of ascites.
- 3-An abdominal ultrasound to detect organ enlargement and degree in addition to the presence of ascites and its degree.
- 4-Laboratory investigations including CBC, ALT, AST, total and direct bilirubin, serum albumin, INR, total leukocytic count count, platelet count and blood urea and serum creatinine.
- 5-HCV virus Ab detected by ELISA
- 6-Estimation of serum resistin level by ELISA

The study included three groups:

- -Group 1: Consisting of 18 cases of chronic HCV infection but having no evidence of cirrhosis (compensated).
- -Group 2: Consisting of 18 cases of chronic HCV infection with evidence of cirrhosis (decompensated).
- -Group 3: Consisting of 16 controls with no clinical or biochemical evidence of any liver disease.

The results of the study showed that patients in group 1 (chronic HCV) had a mean serum resistin level of 7.9 ± 2 ng/ml, group 2 (chronic HCV with cirrhosis) had a mean of 9.6 ± 1.8 ng/ml while group 3 (controls) had a low resistin level of 2.9 ± 1.9 ng/ml. The results showed that group 2 had a significantly higher level than group 3, group 1 also had a significantly higher level than group 3 and finally, group 2 had a higher level than group 1. In other words, serum resistin was elevated in both groups of chronic HCV as compared to the controls and was even higher in the cirrhotic group compared to patients with an early disease. Moreover, all patients were classified according to the Child-Pugh classification into three groups and the serum resistin level was compared in all groups to the controls and to each other, the results of this part of the study revealed that the control $(2.9 \pm 1.9 \text{ ng/ml})$ were significantly lower than Child A $(8.2 \pm 2 \text{ ng/ml})$, Child B $(9.1 \pm 2.2 \text{ ng/ml})$ and Child C $(9.3 \pm 2 \text{ ng/ml})$. However, there was no significant difference between the various Child groups when compared to each other.

When we compared the serum resistin level in both males and females we found that the male controls $(4.1 \pm 2.0 \text{ ng/ml})$ were significantly higher than the female controls $(1.8 \pm 0.4 \text{ ng/ml})$. On comparison of both sexes however in the patients, there was no significant relationship between male cases $(8.8 \pm 2.1 \text{ ng/ml})$ and female cases $(8.9 \pm 2.2 \text{ ng/ml})$. We also found a highly significant relation on comparing male cases $(8.8 \pm 2.1 \text{ ng/ml})$ to male controls $(4.1 \pm 2.0 \text{ ng/ml})$ and also when comparing female cases $(8.9 \pm 2.2 \text{ ng/ml})$ to female controls $(1.8 \pm 0.4 \text{ ng/ml})$.

A study of the possible correlation between the clinical picture and the level of serum resistin showed no correlation between resistin level and the degree of hepatic or splenic enlargement.

A positive correlation was only found between the presence of ascites and the serum resistin level and also between resistin and the degree of ascites.

Conclusion

- 1- Resistin can be of value in follow up of patients for prediction or early detection of decompensation.
- 2-However, it's use in accurate grading of stages of liver dysfunction is not yet justified.