RESULTS

The study was conducted on 40 patients with non-alcoholic fatty liver disease with age ranging from 21 to 60 years with mean ± SD of 41.33 ± 8.55. As well as ten healthy volunteers with age of 22 to 58 years with mean ± SD of 39.1 ± 13.11.

The results of this work were demonstrated in tables from 1 to 12.

Table (1) shows the age and sex of the studied groups (NAFLD group and control group) and their statistical difference. As regarding the age was ranged from 21 to 60 years with mean ± SD of 41.33 ± 8.55 in the patients group and ranged from 22 to 58 years with mean ± SD of 39.1± 13.11 in the control group. As regarding sex, 40% of the patients group were males and 60% were females. While 50% of the control group were males and 50% were females.

Table (2) shows the statistical difference between the two studied groups regarding: weight, height, body mass index and waist circumference, which shows a significant increase in the waist circumference in the patients group and a non significant difference in the weight, height and body mass index.

Table (3) shows the statistical difference between the two studied groups regarding blood pressure; both systolic and diastolic, which shows a non significant increase in the systolic and diastolic blood pressure in the patients group.

Table (4) shows a non significant difference between the patients group and the control group regarding the fasting blood glucose levels. While there was a significant increase in the fasting serum insulin levels and the insulin resistance (HOMA test) in the patients group compared to the control group.

Table (5) shows the statistical difference between the patients group and the control group regarding the levels of blood urea, serum creatinine and serum uric acid, that reveals a non significant change between the two groups regarding the levels of blood urea and serum creatinine, and a significant increase in the levels of serum uric acid in the patients group.

Table (6) shows a significant increase in the levels of serum alanine aminotransferase (ALT) and serum aspartate aminotransferase (AST) in the patients group compared to the control group.

Table (7) shows a significant increase in the total serum cholesterol, serum low density lipoprotein cholesterol (LDL) and serum triglycerides (TG) in the patients group compared to the control group. While it shows a significant increase in the serum high density lipoprotein cholesterol (HDL) in the control group compared to the patients group.

The statistical difference between the levels of plasma adiponectin in the patients group and the control group is shown in table (8), in this, there is a significant elevation in the plasma adiponectin levels in the control group compared to the patients group.

Table (9) shows the significant relation between plasma adiponectin levels and sex, as it reveals the significant elevated levels of plasma adiponectin in females than in males.

Statistical analysis of plasma adiponectin levels in relation to age, body mass index and waist circumference is shown in table (10), in this, there is a significant negative correlation between plasma adiponectin levels and all of; age, body mass index and waist circumference.

The correlation between plasma adiponectin levels and both systolic and diastolic blood pressure is manifested in table (11), in this; there is a significant negative correlation between plasma adiponectin levels and both, systolic and diastolic blood pressure.

In table (12) Statistical analysis shows a significant negative correlation between plasma adiponectin levels and fasting blood glucose, fasting serum insulin levels and insulin resistance (HOMA test). Table (12) also reveals a negative correlation between plasma adiponectin levels and both serum alanine aminotransferase (ALT) and serum aspartate aminotransferase (AST) levels, but this correlation is insignificant. The table shows a significant negative correlation between plasma adiponectin levels and total serum cholesterol, serum low density lipoprotein cholesterol and serum triglycerides levels, while there is a significant positive correlation between plasma adiponectin levels and serum high density lipoprotein cholesterol levels. The correlation between plasma adiponectin levels and kidney function tests shows that, plasma adiponectin levels are significantly positively correlated to both blood urea and serum creatinine levels, while there is a significant negative correlation between plasma adiponectin and serum uric acid levels.