

modifying antirheumatic drugs (DMARDs) and or systemic steroids were investigated during the period between March –December 2006 in the department of rheumatology at Al Kadhimiya Teaching Hospital.

Smokers or patients suffering from conditions that affect the lipid profile such as diabetes mellitus, hypothyroidism, liver or kidney disease, Cushing's syndrome, obesity (body mass index >30) and a history of familial dyslipidemia, were excluded. In addition patients receiving medication affecting lipid metabolism such as lipid-lowering drugs, beta blockers, oral contraceptives, estrogen, progesterone, thyroxine and vitamin E were excluded from the study. Twenty five apparently healthy, non smoking subjects also participated in the study and were considered as a control group. These subjects fulfilled the same exclusion criteria reported for the patient group. None of the subjects participating in the control group had a history of coronary heart disease. The control group was proportionally matched for age and sex to the patient group.

Overnight fasting blood samples were obtained from both ERA patients and the control groups. Serum lipids were determined within six hours of blood sampling. TC-, triglycerides and HDL-C were determined with enzymatic colorimetric method using Shimadzu micro-flow meter CL-720. LDL-C was estimated using the Friedewald formula.

**Friedewald formula=serum TC
[serum HDL+Serum TG/5]⁽²²⁾.**

IgM rheumatoid factor was measured by EELIZA method. ESR was measured by the modified Westergren method. In addition complete blood count with differential, as well as serum glucose, liver and

kidney function tests, were performed for all patients.

All data were analyzed by excel programme using the independent t-test of unequal variances considering ($p < 0.05$) as significant difference.

Results

During the selection period (March –December 2006), twenty-five patients were included in the study. There were 22 women and 3 men with a mean age of 54.2 ± 9.6 years and mean disease duration of 0.5 ± 0.3 years. The clinical characteristics and lipid profiles of patients and control are described in (Table 1).

1-Serum Total Cholesterol LDL-C and TG

The results of the patients had shown a high mean serum level of cholesterol in comparison to control group with a significant difference ($p < 0.05$) as shown in (Table 2).

The mean serum level of LDL-C in patients was higher than the mean serum level of LDL-C in control group. But a non-significant difference ($p > 0.05$) as shown in (Table 3).

On the other hand the mean serum TG level in patients was higher than the mean serum TG level in control group. There was a non-significant difference between serum cholesterol level of patients in comparison to that in control group ($p > 0.05$) as shown in (Table 4).

2- Serum HDL-C

The mean serum level of HDL-C in patients with ERA was lower than the mean serum level of control group. With a significant difference ($p < 0.05$) as shown in (Table 5).

3-The Atherogenic ratio

As a consequence of the above mentioned results regarding total cholesterol LDL-C, HDL-C and TG the mean atherogenic ratio of TC/HDL-C was higher in patients with ERA than in control group with