Analysis of Results

Table (2): Shows sex distribution of the studied groups. In patients group there was 5 males (12.5%) and 35 females (87.5%). In the control group, there was 3 males (13.35%) and 17 females 86.65%).

Table (3): Shows age among the studied groups . The age of the patient group ranged from 27-66 years with a mean of (40.55± 1.28). The age of the control group ranged from 28-65 years with mean of (43.05 ± 2.72).

Table (4): Shows sex distribution of the studied patients according to rheumatoid activity Male patients were 5, 1 male was active (20%) and 4 males were inactive (80%). Female patients were. 35, 10 females were active (28.6%) and 25 females were inactive (71.4%) . The total active patients were 11 (27.5%) and 29 were inactive (72.5%).

Table (5): Shows sex distribution of the studied patients of rheumatoid arthritis according to presence or absence of subcutaneus nodules (S.C nodules). There were 5 male patients, S.C. nodules were present in 1 male patient (20%) and absent in 4 male patients (80%). There were 35 females, S.C nodules were present in 4 female patients (11.4%) and absent in 31 female patients (88.6%). The total patients with S.C. nodules were 5 (12.5%) and the total patients without S.C. nodules were 35 (87.5%).

Table (6) : Shows comparison between patients and control groups regarding Hb%, R.B.Cs count, W.B.Cs count (Total and differential) and platelet counts. There was significant decrease

(P<0.01) in Hb% in patients group (10.57 ± 0.14 gm/dl) as compared to control group (13.12 ± 0.13 gm /dl) . There was significant decrease in R.B.Cs counts (P<0.01) in patients group (3.45 ± 0.06 million /cmm) as compared to control group (3.99 ± 0.06 million / cmm) . As regards total WBCs, there was significant increase in total WBCs (P<0.01) in patients group (7181.25± 193.59 thousands / cmm) as compared to control group (5145.00 ± 145.10 thousands /cmm). As compared between patients and control groups regarding differential leucocytic counts, there was insignificant (P>0.05) difference in stab neutrophil in patient group (3.95 ± 1.55%) as compared to control group (3.20 ± 0.40%, there was insignificant (P>0.05) difference in segmented neutrophil in patients group (6.58± 1.59%), as compared to control group (56.80 ± 1.27%) there was significant decrease in eosinophils in patient group (1.05 ± 0.16%) as compared to control group (2.50 ± 0.35%). There was significant increase (P<0.05) in basophils in patient group (0.90 ± 0.85%) as compared to control group (0.05 ± 0.03%) . There was significant increase (P<0.05) in lymphocytes in patient groups (35 . 43 ± 0.99%) as compared to control group (32.55 ± 1.07%). As regards monocytes, there was insignificant difference between patient group (1.30 ± 0 .18%) and control group (1.90 ± 0.37%) .

Table (7): Shows comparison between the studied patients and controls regarding erythrocyte sedimentation rate (E.S.R). There was significant increase in E.S.R (P< 0.01) in patient group (34.23± 14.76 mm) as compared to control group (11.30± 75mm).

Table (8) : Shows E.S.R. among the studied patients according to rheumatoid activity. There was significant increase in E.S.R.

(P<0.01) in active patients (55.45 ± 2.65mm) as compared to inactive patients (26.17± 1.04mm).

Table (9) : Shows comparison between studied patients and control groups regarding R.F. There was significant increase (P<0.01) in R.F. titers in patient group (53.40 ± 4.21 IU/L) as compared to control group (3.60 ± 11.08 IU/L) .

Table (10) : Shows comparison between the studied patient and control groups regarding C-reactive protein (CRP). There was significant increase in CRP levels (P<0.01) in patient group (29.85 ± 1.88 mg/ml) as compared to control group (4.5± 1.62 mg/ml).

Table (11) : Shows comparison between the studied patients and controls regarding liver enzymes. There was significant increase in SGOT levels in patient group (2063 ± 1.28 IU/L) as compared to control group (10.60 ± 0.53 IU/L). There was significant increase (P<0.01) in SGPT levels in patients group (19.65 ± 0.88 IU/L) as compared to control group (10.55 ± 0.69 IU/L). As regards ALP, there was significant increase (P<0.01) in ALP levels in patient group (2.13 ± 0.1 Sigma unit /L) as compared to cotnrol group (0.84 ± 0.20 Sigma unit/L) .

Table (12) : Shows comparison between the studied patients and controls regarding serum creatinine. There was significant increase (P<0.01) in patient group (1.01 ± 0.05 mg/dl) as compared to control group (0.65 ± 0.05mg/dl) .

Table (13) : Shows comparison between the studied patient and control groups regarding serum B_2 - microglobulin (S.B_2-M).There was

significant increase (P<0.01) in patient group(2.65 ± 0.16 mg/ml) as compared to control group 1.02 ± 0.09 mg/ml).

Table (14) : Shows serum B_2-microglobulin (S.B2-M) in the studied patients according to rheumatoid activity. There was significant increase (P<0.01) in S.B_2-M levels in active patients (3.89 ± 0.19 mg/ml) as compared to inactive patients (2.18 ± 0.12 mg/ml).

Table (15) : Shows comparison between the studied patient and control groups regarding serum interleukin-6 (S.IL-6). There was a significant increase (P<0.01) in S.IL-6 levels in patient group (366.54 ± 37.96 pg/ml) as compared to control group (20.80 ± 2.21 pg/ml).

Table (16): Shows serum IL-6 in the studied patients according to age. There was insignificant difference (P>0.05) in S.IL-6 levels between patients with age above 30 years (385.50 ± 39.50 pg/ml) and patients with age below 30 years (270. 50 ± 80 .47 pg/ml).

Table (17): Shows serum IL-6 levels among the studied patients according to sex distribution. There was insignificant difference (P>0.05) in S.IL-6 levels between males (409.60 ± 100.16 pg/ml) and females (372.29 ± 40.04 pg/ml).

Table (18) : Shows serum IL-6 levels among the studied patients according to drug therapy. There was insignificant difference in S.IL-6 levels between patients receiving NSAI drugs (411.13 ± 55.60 pg/m), patients receiving CS drugs (411.40 ± 4.53 pg/ml) and patients receiving IS (343.50 ± 79.77 pg/ml).

Table (19): Shows serum IL-6 levels among the studied patients according to disease duration. There was no signifcant difference (P>0.05) in S.IL-6 levels in patients with disease duration below 10 years (385.75 ± 39.56 pg/ml) and in patients with disease duration above 10 years (268.25 ± 75.81 pg/ml).

20) : Shows serum IL-6 levels among the studied patients according to A.N.A. There was significant increase (P<0.01) in S.IL-6 in patient with positive A.N.A (650. 67 ± 120.03 pg/ml) and patients with negative A.N.A (351 . 57 ± 36 . 33 pg/ml) .

21): Shows serum IL-6 levels among the patients according to rheumatoid activity. There was significant increase (P<0.01) in active rheumatoid arthritis patients (663.18 ± 53.94 pg/ml) as compared to inactive patients (254.02 ± 26.86 pg/ml).

Table (22): Shows serum IL-6 levels among the studied patients according to presence or absence of R.Fs. There was significant increase (P< 0.05) in seropositive patients (416.1 ± 40.5 pg/ml) as compared to seronegative patients (175.7± 27.7 pg/ml).

23): Shows correlation coefficient (r) & probability value of the parameter related to IL-6 among the studied group. There was significant positive correlation between IL-6, platelet count (r= 0.823,P<0.01), ESR (r=0.706,P<0.01), B_2- microglobulin (r=0.574 ,P<0.01) R.F. titer (r=0.798,P<0.01) and CRP (r= 0.765, P<0.01) while was negative correlation between IL-6, Age (r= 0.268 , P> 0.05) and disease duration (r= 0.060 , P> 0.05).

Table (24): Correlation coefficient (r) & probability value of the parameter related to B2-microglobulin among the studied groups. There was

positive correlation between B_2- microglobulin , ESR (r=0.817) (P>0.05) IL-6 (r=0.574 , P<0.05) , R.F. titer (r= 0.739 , P<0.05) and CRP (r= 0.763 , P<0.05).

Fig. (1) : Sex distribution among the studied groups.

Fig. (2) : Sex distribution of patients according to rheumatoid activity.

Fig. (3) : ESR among the studied groups.

Fig. (4) : ESR among patients according to rheumatoid activity.

Fig. (5) : R.Fs among the studied groups.

Fig. (6) : CRP among the studied groups.

Fig. (7) : Serum B_2 - M among the studied groups.

Fig. (8) : Serum B_2 - M among patients according to rheumatoid activity.

Fig. (9) : Serum IL - 6 among the studied groups.

Fig. (10) : Serum IL - 6 among patients according to drug therapy.

Fig. (11) : Serum IL - 6 among patients according to disease duration.

Fig. (12) : Serum IL - 6 among patients according to ANA.

Fig. (13) : Serum IL - 6 among patients according to rheumatoid activity.

14) : Relationship betwen B_2-M level and ESR among the studied groups.

15) : Relationship betwen Serum B_2-M level and CRP among the studied groups.

16) : Relationship betwen S.IL- 6 level and S. B_2-M among the studied groups.

17) : Relationship betwen serum IL- 6 level and ESR among the studied groups.

18) : Relationship betwen serum IL- 6 level and CRP among the studied groups.

19) : Relationship betwen serum IL- 6 level and R.Fs titre among the studied groups.