

between normal subjects and different categories of patients with RA and related to degree of inflammation.

Normal subjects:

Comparison of the distributions of the serum TSA and LSA in both sexes, Table (3); shows that the mean serum values for TSA in female and male was (63.61±10.69) and (71.52±5.62) mg/dl

respectively, while the mean serum value for LSA was (20.50±3.68) and (23.90±4.26) mg/dl for female and male respectively. The results show little differences between females and males for both TSA and LSA, so that the total means for both sexes was (67.57±7.56) and (22.20±3.29) mg/dl respectively.

Table 3: Serum levels of TSA and LSA in normal

Sex	TSA mg/dl (Mean±SD)	LSA mg/dl (Mean±SD)
Female (n=25)	63.31±10.69	20.50±5.68
Male (n=18)	71.52±8.82	23.90±4.26
Total (n=43)	67.57±7.56	22.20±3.29

Rheumatoid Arthritis (RA) patients:

TSA and LSA were analyzed with respect to degree of inflammation of the disease, so separate calculation was made for each test's levels of 43 normal and 54 patients with RA are shown in table 4. In the normal sera samples the overall TSA level was found to be (67.57±7.56) mg/dl, while the corresponding level in 54 patients sera samples was (88.25±12.96) mg/dl, this increase of 31% in TSA level was statistically significant ($P<0.001$).

Both in the normal and the various groups of patients with different degree of disease, there were significant difference between values obtained for females and

males for each characteristics of the disease state, therefore they were grouped independent. The mean serum TSA levels was found to be (79.22±11.01) and (76.90±10.23) mg/dl for female and male with low activity; and (104.23±27.22) and (92.68±17.27) mg/dl for serum female and male with high active disease.

The magnitude of the increase in the value varied between 17% for female and 14% for male patients with low activity. In contrast, the magnitude of the increase in serum TSA level varied between 54% and 37% for female and male with active disease respectively.

Table 4: Serum TSA values of patients with RA patients.

Cases	mg/dl (Mean±SD)	Change in TSA level (%)
RA with Low activity		
Female (n=21)	79.22±11.01	+17
Male (n=8)	76.90±10.23	+14
RA with High activity		
Female (n=16)	104.23±27.22	+54
Male (n=9.0)	92.68±17.26	+37
Total (n=54)	88.25±12.96	+31
Normal (n=43)	67.57±7.56	-

The sensitivity of TSA observed in our study fell from 38% (8 of 21) to 25% (2 of 8) for female and male with low activity disease, while the values reached 75% (12 of 16) to 56% (5 of 9) for female and male

with high activity disease figure 1, this increase of sensitivity might contribute to the development of RA and to the progression of the disease itself.