

## **Summary and Conclusion**

This work was carried out on forty patients attending the out patient clinic of rheumatology and rehabilitation department of Benha University Hospitals

## They were divided into 3 groups:

- 1- Thirty rheumatoid arthritis patients fulfilling the criteria of the American College of Rheumatology (ACR) for the diagnosis of RA.
- 2- Ten patients with other rheumatic diseases (ankylosing spondilitis, SLE) as a control group (I) ten healthy volunteers matched for and sex with our patients as control group (II) the aim of this work was to determine the frequency of AKA in the sera of patients with RA as well as patients with other rheumatic diseases and age matched healthy controls and to determine the clinical value & correlations with the disease activity, severity parameters.

## All patients was subjected to the following:

- Full history taking, complete clinical examination
- Locomotor system examination
- Laboratory investigation for;
  - Erythrocyte sedimentation rate
  - Full blood picture
  - Rheumatoid factor
  - Antikeratin antibody titre using indirect immunofluorescence technique

- Plain x-ray on both hands
  - Antero-posterior view
  - Catching ball view

The result of our study were calculated, tabulated and statistically analyzed.

## The finding of this work were as follows:

- 1. There were a statistically significant increase in the mean level of AKA titre in RA patients being () in relation to control group (I) and () control group (II) both control groups.
- 2. The sensitivity, the specificity and the positive predictive value of AKA frequency in RA patients were lower in relation to those of RF while negative predictive value of AKA frequency was higher in relation to the negative predictive value of RF
- 3. There were a statistically significant increase in the frequency of AKA positive patients in sero positive RA patients
- 4. There were a statistically significant increase in the frequency of AKA positive sera in RA patients 23 patients (76.7%) as compared to patients with other rheumatic disease which was 5 patients (50%) and 3 subjects (30%) of healthy controls.
- 5. All the sero negative patients were found to be AKA negative
- 6. There was highly statistically significant increase in the mean of AKA titre in RA patients in relation to their functional capacity according to SteinBroker classification being higher in advanced grades
- 7. There were statistically significant increase in the mean of AKA titre RA patients in relation to their radiological grading according to Larsen, classification and there were highly

significant positive correlations between AKA titre and morning stiffness, articular index, functional capacity, visual analogue scale, ESR, RF and radiological grading, while there were highly significant negative correlation with the mean grip strength of both hands and hemoglobin percentage.

From our study, we can conclude that the frequency of AKA is increased in patients with RA compared to other rheumatic diseases.

AKA plays an important rule as one of the most specific serological marker for RA after RF. Presence of AKA has a prognostic significance as it is associated with more severe and active forms of the disease.

We recommend that. AKA to be used in follow up as well as in diagnosis of RA, its association with other markers confirms this diagnosis.