# SUMMARY & CONCLUSION

The aim of this work is to assess clinically the joint disbility and to measure blood and synovial fluid parameters from patients with rheumatoid disease and to determine which are related to clinical activity and which are most useful.

40 patients having rheumatoid arthritis were selected from the out-ptient clinic at Benha university hospital.They included 6 males and 34 females with age ranging from 35 to 60 years with a mean age of 45.63±7.57 , the selected cases fulfilled the criteria necessary for diagnosis of rheumatoid arthritis according to the Revised American Rheumatism Association criteria (Arnett et al., 1988). Each patient was investigated to show evidence of disease activity as defined by the presence of at least three of the following; Eryth rocyte sedimentation rate of 30 mm. or higher, 45 minutes or more of morning stiffness, Ritchie articular index of 10 or more, the presence of 6 or more paniful joints and 3 or more swollen joints. All patients

had persistant synovitis of the knee.

All patients were subjected to the following:-

- Full history taking with stress on duration of morning stiffness in minutes.
- Clinical examination with stress on the locomotor system, including the following :-

  Joint tenderness according to the method of Rithie et al., (1968), counting the number of paniful joints, and the number of swollen joints and measurement of grip strength of both hands.
- Blood analysis including the following :-

  Erythrocyte sedimentation rate, Haemoglobin concentration, C-reactive protein total leucocytic count and latex fixation titre rheumatoid factor.
- Synovial fluid analysis including the following :-

  Glucose level, latex fixation titre rheumatoid factor, total leucocytic count and polymorphs count.
- Correlation coefficients was made for each item of the clincal , blood and synovial fluid.

Our findings in this work can be summarized in the

following :-

- Significant correlation between erythrocyte sedimentation rate and the clinical parameters of disease activity .
- Significant correlation between C-reactive protein and the clinical parameters of disease activity.
- Insignificant correlation between haemoglobin concentration and the clinical parameters of disease activity.
- Insignificant correlation between total leucocytic count and the clinical parameters of disease activity.
-Insignificant correlation between rheumatoid factor titre and the clinical parameters of disease activity.
- Insignificant correlation between glucose level in the synovial fluid and the clinical parameters of disease activity.
- Insignificant correlation between rheumatoid factor titre in the synovial fluid and the clinical parameters of disease activity.
- Significant correlation between total leucocytic count in the synovial fluid and the clinical parameters of disease activity.
- Significant correlation between polymorphs count in

the synovial fluid and the clinical parameters of disease activity.

Lastelly, it can be concluded that, four parameters are most accurately reflect disease activity and correlated significantly with all parameters of disease activity in rheumatoid arthritis patients :-

1- Erythrocyte sedimentation rate

2- C-reactive protein

3- Total leucocytic count in the synovial fluid

4- Polymorphs count in the synovial fluid

Our four indices are simple and should assisst those who wish to assess progress of disease.