Summary and Conclusion

This study was carried out on 60 subjects, 50 patients with histopathologically proved glomerulonephritis, 29 of them were females and 21 were males, selected from inpatients of the Internal Medicine Department, Benha University Hospital, and 10 healthy volunteers serving as reference group. The patients were classified into 2 groups ; group I ; primary glomerulonephritis (with no detectable cause). It comprises 14 patients and group II : Secondary glomerulonephritis. It comprises 36 patients (10 patients with systemic lupus erythematosus) (6 patients with Wegener's granulomatosus) (10 patients with poststreptococcal glomerulonephritis) (5 patients with Churg - Strauss syndrome) (5 patients with polyarteritis nodosa). Thorough history and clinical examination were done for all cases. The following investigations were performed to every subjects : Urine analysis, estimation of 24 hour urinary protein, determination of serum creatinine level, histopathological examination of renal biopsy (for patients only) and determination of ANCA and its type in serum by IIF technique

This work aimd at examining the prevalence and clinical association of ANCA in patients with glomerulonephritis to detect the risk of relapse and to determine the need for frequent clinical review besides the possible use of ANCA as a marker for continuing maintenance immunosuppression therapy.

* ***The result of this study showed the following :***

- The ANCA was positive in 5 out of 14 cases with primary glomerulonephritis (35.7%) and the type of ANCA was p-ANCA in 4 cases (80%) and c-ANCA in one case (20%).
- Three out of 10 of cases with systemic lupus erythematosus (30%) were ANCA positive and the type of ANCA was p-ANCA in all cases.

- Five out of 6 of cases with Wegener's granulomatosus (83.3%) were ANCA positive and the type of ANCA was c-ANCA in all cases.
- Two out of 10 of cases with poststreptococcal glomerulonephritis were ANCA positive and the type of ANCA was p-ANCA in one case and c-ANCA in the other.
- Foure out of 5 of cases with Churg - Strauss syndrome (80%) were ANCA positive and the type of ANCA was p- ANCA in all cases.
- Four out of 5 of cases with polyarteritis nodosa were ANCA positive and the type of ANCA was p-ANCA 3 cases (75%) and c-ANCA in one case (25%).
- There is significant and positive relationship between ANCA and hematuria, dialysis , severity of hypertention, serum creatinine level and proteinuria (parameter of severity of glomerulonephritis).
- There is significant relationship between ANCA and relapse of disease.

Although this work did not monitor the ANCA titer, yet we concluded the following :

1- ANCA positivity reflects the disease severity and activity.

2- ANCA positivity correlate strongly with disease relapse.

3- ANCA pattern correlates with the disease entity.

4- ANCA could be used as a follow - up labloratory tool to determine when and whether or not to stop a maintained immunosuppressive therapy.