SUMMARY AND CONCLUSION

No organ is more subjected to allergic involvement than the nose (Sherman and Kessler 1957) . The allergic reactions result in the release of many chemical mediators. The nasal mucosa is readily affected by the endocrine secretion. In allergic diseases, non infectious and non toxic substances result in a type of immune response which give rise to symptoms in single individuals which could be termed allergy and the results is the synthesis of antibodies (immunoglobulins) against actual antigens.

Therefore this work was made in an attempt to evaluate the relationship of some hormones and immunoglobulins with nasal allergy.

Our study comprised two groups :-

I. Control group included 17 subjects.

II. Allergic patients group included 20 patients. All groups of the present study were subjected to the following :

1- Full history was taken and in case of allergic patients a questionnaire was taken.

2. Complete general and E.N.T. examination.
3. Immunological assay of IgA, IgM, IgG and IgE.
4. Nasal smears for eosinophils.
5. Hormonal assay for plasma cortisol, thyroid hormones(T_3 & T_4) and thyroid stimulating hormones.(TSH).

Our results demonstrated the following :-

1. The mean. levels of IgG, IgA and IgM were not significantly different between control and allergic rhinitis patients.
2. The levels of IgE in allergic patient were significantly higher compared to the control group .
3. The eosinophils in the nasal smear of allergic patient ranged from 5-95% of cells and were less than 5% in the control group.
4. In the present study, the afternoon level of T_3 was significantly higher in allergic patient than in the control group.
5. The T_4 & TSH levels were, however, non significantly different than the control group both in the morning and evening samples.
6. Cortisol diurnal variation was detected in both control and allergic groups .

   In allergic patients cortisol levels in the morning samples were not significantly different than the

corresponding level in controls, however, evening samples were significantly higher.

7. There was no significant difference in the results of allergics with and without polypi.