SUMMARY AND CONCLUSION

Atopic dermatitis is a sperate and distinct form of eczema. It is a chronic, hereditary and highly pruritic inflammatory dermatosis (Kenneth Blaylock, 1985).

Immunological disturbances in the form of increased serum IgE level and disturbed cell mediated immunity and other immunological disturbances appear to play the main role in the pathogenesis of the disease (Hanifin, 1990).

The cytokine network represents a group of immunologically active substances produced by different cells through which different steps at the immune system are regulated (Luger and Schwarz, 1991). The disturbances of the cytokine network associated with atopic dermatitis may be the basis of the immunological changes encountered in this disease (Thestrup-Pederssen, 1989).

This study was done for detection of staphylococcal colonization in involved and univolved skin of atopic dermatitis patients as well as normal control group, for measurement of interleukin-8 (IL-8) in their sera, and to asses their role in the pathogenesis, exacerbation and chronic course of AD.

The study included randomly selected 25 AD patients, 14 males and 11 females with their ages ranging from 4 months to 20 years, attending the outpatients clinics of both dermatology department Mansoura General Hospital and Mansoura University Hospital. Also 10, age matched, normal controls were included.

Thorough history and clinical examination were performed to these patients, then they were classified into mild (10), moderate (10) and severe (5) cases according to Rajka (1990) criteria.

The bacteriological study on the patients and control group was done by contact-plate method with subsequent culturing on CLED agar. The colonies were counted and evaluated .

The immunological study was done by determining IL-8 level in sera of the patients and controls using ELISA technique.

The results were tabulated and statistically studied. These results showed that:

- (1) Staph. aureus colonization was greatly higher in skin of AD patients than controls.
- (2) Staph. aureus colonization was higher in affected skin than clinically normal skin in AD patients.
- (3) Staph. aureus colonization was directly proportional to the severity of AD.

(4) Interleukin-8 (IL-8) was significantly increased in AD patients than the control group. The degree of IL-8 increase was directly proportional to the severity of AD.

From these data it is concluded that: (1) Staph. aureus may play an important role in the pathogenesis or at least in exacerbation of atopic dermatitis. (2) IL-8 measurement may be a useful tool for the study of the pathogenesis and clinical course of AD.