SUMMARY AND CONCLUSION

Atopic dermatitis is the commonest chronic cutaneous disease of childhood in the first years of life**,** it is often the first manifestation of allergic diseases. Atopic dermatitis is a chronic inflammatory pruritic skin disease that affects a large number of children and adults**.**

Atopic dermatitis is an inflammatory skin disease characterized by presence of raised serum IgE levels, a positive personal or family history for an atopic disease, and skin rash which is itchy, chronic and relapsing and characterized by itchy papules (occasionally vesicles in infants) which become lichenified and typically have a flexural distribution.

One of the possible causes of atopic dermatitis is Staphylococcal carrier in skin and nose, which is gram positive, non motile, non spore forming cocci arranged in clusters. The bacterial colonization is well recognized as an important exacerbation factor that can promote AD flare up.

To explore the role of S. aureus of skin and nose in atopic dermatitis, fifty patients of AD were selected from the Outpatient Clinic Of Dermatology Department Of Benha University Hospital, Dermatology and Leprosy Polyclinic and Benha Teaching Hospital, (28 female and 22male) their ages range from 0.5 years to 24 years with mean age (4.44±5.19years). Twenty persons without personal and familial history of AD or allergic

diseases, served as control group (12 female and 8 male) their ages ranged from 1.5-18 years with mean age (8.21±7.43years).

The two groups accepted to undergo skin and nasal swabs, swabs were incubated on blood agar, incubated aerobically at 37C^{o} for 24-48 hours. antibiotic sensitivity test was done for positive S. aureus in skin lesion.

In this study S.aureus colonization in lesion skin swab was (70%) and (10%) in controls. In nasal S.aureus colonization was (40%) and (15%) in controls . In non-lesion skin S.aureus colonization was (24%).

Statistical analysis showed that there is a significant increased percentage of staphylococcal carrier in skin (lesional and non lesional) and nose in AD patients more than control persons, also there is statistically significant increased in incidence of skin and nasal S. aureus colonization with severity of AD , and there is statistically significant increased incidence of skin and nasal staphylococci with age of patients. there is Correlation between age of patients and severity of AD.

S. aureus colonization was higher in patients with other atopic diseases or with family history of AD but this was not significant, there was no significant increased incidence of S. aureus colonization according to sex.

Antibiotic sensitivity to S. aureus colonization in skin lesion in this study was Fusidic acid 97.1% ,Vancomycin 97.1%, Flucloxacillin 91.4% ,

Gentamicin 82.9%,Cephalexin77.1%, Erythromycin 51.4 %, Penicillin 22.9% .

So, it could be concluded from this study that staphylococcal carrier in skin and nose may be a possible an etiological or contributing factor in patients with AD. Antibiotic susceptibility would be advisable if signs of infection persist after standard therapy.