## **SUMMARY**

Seborrhoeic dermatitis is a common skin disease. It can be diagnosed by its characteristic red to yellow-brown lesions covered with greasy scales distributed in areas with a high number of sebaceous glands, such as the scalp, face and upper trunk. There is an association between seborrhoeic dermatitis and the lipophilic yeast pityrosporum ovale but its exact aetiological role is not known. The yeast is a member of the normal cutaneous flora but also an oppurtunistic pathogen. It was found also that patients with seborrhoeic dermatitis have a deficient cell-mediated immunity to pityrosporum ovale. (Wilker et al., 1988).

The aim of this study was to isolate and identify pityrosporum ovale as a causative agent of seborrhoeic dermatitis, and to evaluate the role played by cell-mediated immune response in the pathogenesis of seborrhoeic dermatitis.

Fifty patients diagnosed clinically as seborrhoeic dermatitis selected from Dermatology and venereology outpatient clinic of Benha University Hospitals. They were of different age and sex. The specimens were collected from the site of lesion for direct microscopic examination using 20% potassium hydroxide preparation, then were cultured on the specific medium for the growth of pityrosporum ovale (glucose neopepton yeast extract

ager medium containing olive oil, Tween and glycerol monostearate) and incubated at  $37\mathring{C}$  and observed daily for up to 10 days. The growth were identified by macroscopic and microscopic examination.

The results of this study revealed that the heighest incidence of the disease in the studied group was seen in patients between (20-30) years old (36%), while the lowest incidence was seen in patients between (40-50) years old (8%) and also in patients over 50 years old (8%). The disease was more common among females (72%) than males (28%).

A positive family history of seborrhoeic dermatitis was given by (44%) of patients and seasonal influence on the symptoms was reported by (62%) of patients where the disease became worse in winter.

Direct microscopic examination of the specimens revealed positive results in (72%) of cases . Positive culture on a glucose neopepton yeast extract agar medium containing olive oil 2%, Tween 0.2% and glycerol monostearate 2.5 g L-1 obtained in (54%) of cases .

Blood lymphocytes were obtained from each case for immunological study which was performed by E.Rosette test and by lymphocyte transformation test to evaluate the T-cell function

in patients with seborrhoeic dermatitis and twenty normal persons as a control.

The present study revealed that T-cell function in patients with seborrhoeic dermatitis was not affected by the duration of the disease, its recurrance or by receiving previous antifungal drugs (no significant difference).

Concerning the percentage of T-cell as demonstrated by E.Rosette % test and lymphocyte blast transformation test, were shown a significant difference between normal controls and patients.