

## INTRODUCTION

The field of trace element has grown rapidly over the past few years, particularly after the development of novel techniques as atomic absorption spectrophotometry which had allowed the reliable measurements of several trace elements in tissues and so had opened a new field for many researches (*Henkin, 1975*).

Zinc plays an important role in D.N.A. and protein synthesis and is intimately involved with copper as cofactors in several important enzyme systems (*El-Kholy et al., 1990*).

Moreover, the importance of trace elements in general, and zinc in particular in development and maintenance of the immune system is now widely accepted (*Fraker et al., 1986*).

*Michaelsson and Ljunghall (1990)* reported that zinc level in the epidermis was decreased in psoriatic patients. There was no significant reduction of serum zinc concentration in these patients. Similar results were detected by *Tasaki et al. (1993)*.

Selenium concentrations were detected in plasma and whole blood in (64) patients with psoriasis, values were compared with those of matched controls; no significant reduction was observed in contrast with previous reports of reduced selenium level in psoriasis (*Donadini et al., 1992*).

The levels of copper and zinc in both serum and hair of 12 patients with atopic dermatitis were estimated by *El-Kholy et al. (1990)*, they

found that, the mean concentrations of zinc in serum and hair were significantly decreased. On the other hand, a significant increase in serum and hair copper was demonstrated.

*Burton et al. (1992)* found that lesions of the face and scalp resembling seborrhoeic dermatitis are a feature of zinc depletion syndrome, but they had not achieved any striking improvement in their patients with seborrhoeic dermatitis by treatment with oral zinc.

Copper may play a major role in the pathogenesis of pityriasis alba (*Ebrahim et al., 1992*).