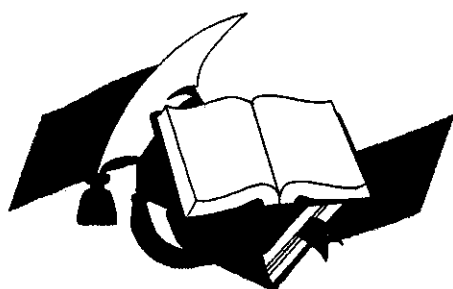


SUMMARY AND CONCLUSION



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

Psoriasis is a common and chronic disease with a complex mode of inheritance and unsettled aetiology (*Bos, 1988*).

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 and psoriasis may be the basis of the immunological changes encountered in these disease (*Thestrup-Pederssen, 1989*).

This study was done for measurement of **beta-endorphin**, cortisol, thyroxine, and thyroid stimulating hormone in the sera of atopic dermatitis, psoriasis patients as well as a normal control group. The study was also done for the detection of the source of **beta-endorphin** whether central or peripheral from the circulating T-lymphocytes.

The study included 20 atopic dermatitis patients they were 11 males and 9 females with their ages ranging from 2-56 years. They were ten mild and ten severe cases selected from the out patient clinic of Dermatology, Benha University Hospital, Zagazig University.

The study included also 20 psoriatic patients they were 11 males and 9 females with their ages ranging from 10-56 years. They were 10 mild and 10 severe cases selected from out patients clinic of Dermatology, Benha University Hospital. This besides 10 healthy control subjects of matched age and sex were chosen.

Non of these patients had received any systemic medication for at least 3 months prior to the study. Only emollients were applied as topical treatment during a 2-week wash out period.

Thorough history and clinical examination were performed to these patients. The atopic dermatitis patients were chosen 10 mild and 10 severe according to *Rajka (1990)* criteria. The psoriatic patients were chosen 10 mild and 10 severe according to PASI score (*Ramsay and Lawrence, 1991*).

The determination of **beta-endorphin** concentration in the sera of patients and controls was done using RIA technique. The cortisol, thyroxine, and thyroid stimulating hormones were determined in the sera of patients and controls using the principle of chemiluminescent enzyme immuno-assay.

The results were tabulated and statistically studied by Mann-Whitney test. These results showed that:

- 1- **Beta-endorphin** concentration was about 50% increased in atopic dermatitis patients as compared to normal control. The highest concentration was found in patients with severe atopic dermatitis and those with skin affection more than 36% of body surface area and in

cases associated with severe pruritus i.e. the increase in the level of β -endorphin correlated to the disease severity.

- 2- **Beta-endorphin** concentration was more than twice that of normal controls in psoriatic patients the highest concentration was found in patients with more than 10% of body surface area affection and in severe psoriatic patients when compared to mild psoriatic patients while pruritus had a non significant effect on beta-endorphin concentration.
- 3- There was a significant increase of **beta-endorphin** concentration in psoriatic patients versus atopic dermatitis and in psoriatic and atopic dermatitis patients versus controls.
- 4- Stress had a non significant effect on **beta-endorphin** concentration in psoriasis as well as atopic dermatitis patients.
- 5- Stress showed a significant effect on cortisol level in psoriasis and atopic dermatitis patients while stress showed a non significant effect on thyroxine and thyroid stimulating hormone levels.
- 6- Cortisol concentration was found to be higher in patients with psoriasis versus atopic dermatitis and control groups.
- 7- Thyroxin concentration was found to be higher in patients with psoriasis versus atopic dermatitis patients while thyroid stimulating hormone (T.S.H) showed no difference in all patients and control.

Conclusion:

This study suggests that the relationship between **beta-endorphin** concentration and some clinical parameters of the diseases in concordance with elevated neuropeptide level in AD and psoriasis suggest that skin inflammation may be a factor responsible for **B-END** production possibly by activation of neuropeptide generation by

peripheral blood lymphocytes as well as dermal infiltrating lymphocytes rather than central mechanism of production.

Recommendation:

Further studies are needed to confirm the association between B-END and stress, so it is better to be measured at the time of stress and also it is better to be measured before and after treatment to evaluate its role in the disease aetiopathogenesis.