INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

SERUM IGE LEVELS IN PATIENTS OF DERMTOPHYTOSIS, DOES IT SAY SOMETHING ABOUT THE CURRENT EPIDEMIC OF DERMATOPHYTOSIS IN INDIA? - A PILOT STUDY

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Introduction: Dermatophytes are related fungi capable of causing ring worm or dermatophytosis. Microsporum, Trichophyton and Epidermophyton are three species responsible for dermatophytosis. Dermatophytes are known to elicit both humoral and cell mediated immune response. Cell mediated immune response is known to help clearance of infection where as humoral immune response and elevated IgE is linked with chronic infection.

Aims and Objectives: This is a pilot study to measure level of total serum IgE in patients of Dermatophytosis and its correlation with various clinical and epidemiological parameters.

Material and methods: Randomly selected 60 adult patients of active Dermatophytic infections proven with KOH examination and willing to give consent were enrolled in study. Quantitative assay of Serum IgE was performed using Chemiluminescent immunoassay using Elecsys© and Cobas e Analyser (Roch Diagnostic. Epidemiological data like Age, Sex and Family history were evaluated. Clinical parameters like Body Surface Area involvement (BSA), Site of involvement, Duration of disease, Morphological presentation, History of use of topical, oral and injectable steroid were evaluated. Intensity of itch is recorded in patient reported scale. History of Atopy was evaluated.

Results: Out of total 60 patient studied 88% had IgE levels above upper limit of normal laboratory range. 55% patients had IgE levels raised above four time upper limit of normal laboratory range. Significant correlation was found between total Body Surface Area (BSA) involvement and increase in IgE levels (P=0.006, Spearman's rho). Similarly statistically significant correlation was found between duration of disease and IgE levels. (P=0.001, Spearman's rho).

Conclusion: Impaired host immune response to Dermatophytes could be one of reason behind chronicity and recalcitrant cases observed during recent epidemic of Dermatophytosis in India.