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An Interesting Case Report of Non-Hodgkin's Cutaneous Lymphoma T-Cell Type.

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ABSTRACT

Primary cutaneous lymphoma (PCL) is defined as non-Hodgkin lymphoma that present in skin with no evidence of extracutaneous disease at the time of diagnosis. After gastro-intestinal lymphomas, PCL are the second most common group of extranodal non-Hodgkin lymphoma with an estimated annual incidence of 1/100 000.

Keywords: Cutaneous lymphoma , Epidermotrophism

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CASE PRESENTATION

81 yr old male presented in dermatology outpatient block with history of Itchy pigmented lesion all over body sparring the face alone one and half years duration. The lesion started as pigmented lesion over abdomen progressed to entire body. Patient was apparently normal 1.5 yrs. back following which he developed a small itchy lesion on left side of abdomen for which native treatment was taken (nature not known) & then lesions progressed to involve entire body, reduced urine output and pedal edema, loss of appetite. On examination multiple erythematous and pigmented scaly plaques over more than ninety percent body surface area. Auspitz sign was negative, Scalp had Diffuse scaling with pigmented plaque, and Nails had Dystrophy & pigmentation. Palms and Soles showed scaly plaques. Mucosa was normal. Peripheral smear showed absolute lymphocytosis but no atypical lymphocytes. Ultrasound abdomen was normal. Punch biopsy was sent from verrucous plaque a) right hand b) right thigh. The biopsy was stained with haematoxylin and eosin, diagnosis was made. IHC was done CD45, CD3, CD20, KAPPA, CD 30 stains were applied. Haematoxylin and eosin stained sections showed Acanthotic epidermis with extravagated melanocytes few necrotic keratinocyte along with dermal edema Some lymphocytes, small with condensed nucleus and some large with hyper chromatic nuclei present, diffusely infiltrating from epidermis to subcutaneous tissue, Cytoclastic activity of blood vessels present. Lymphocytes rimmed around adipocytes. (Fig I)

CD45 showed membrane positivity (Fig ii), CD3 was taken up by the nucleus of the lymphocytes (Fig iii). But CD20, KAPPA and CD 30 were not taken up by the lymphocytes. Since CD3 is positive and CD20 is negative the lymphocytes are confirmed to be T lymphocytes.

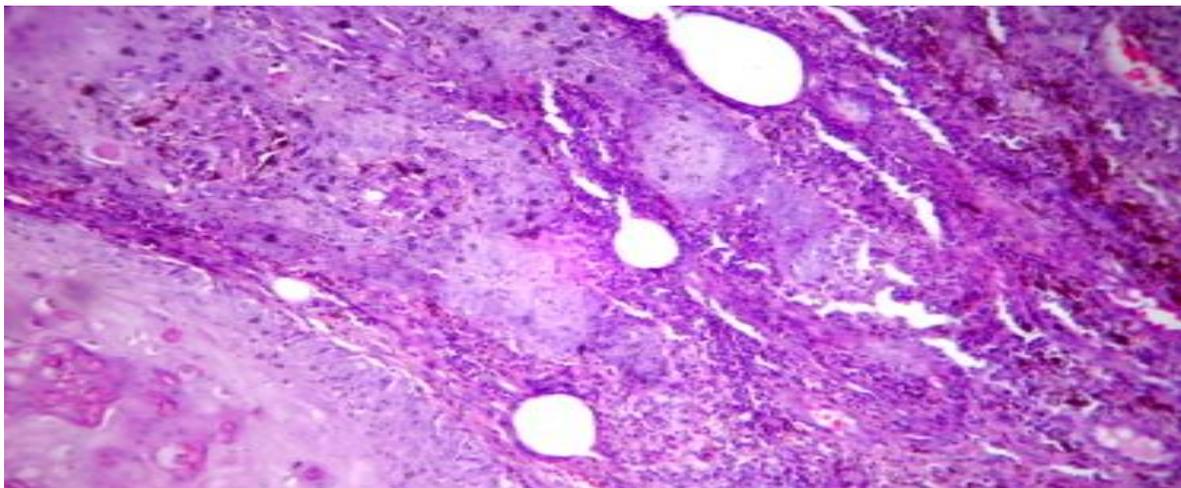


Figure i: 10X Lymphocytes rimmed around adipocytes

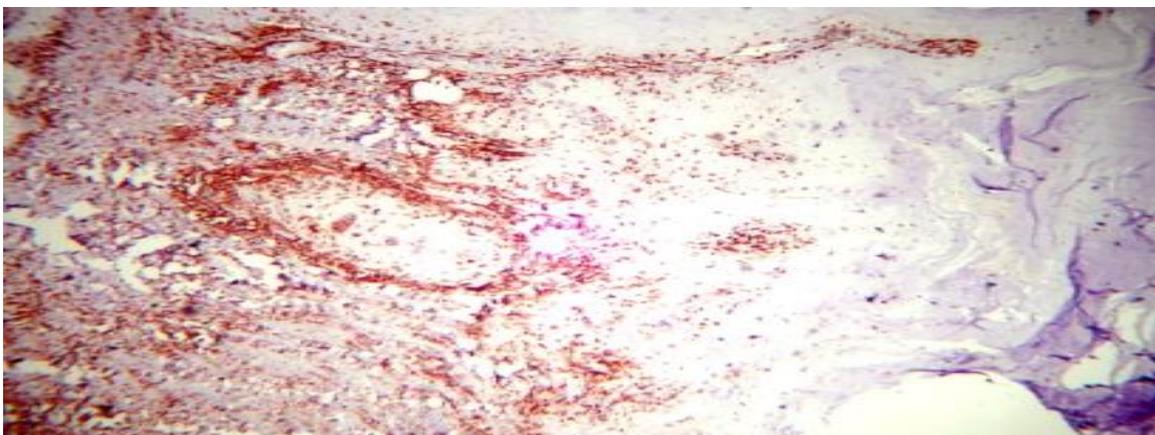


Figure ii: 10X Immunohistochemistry section showing CD45 Positivity

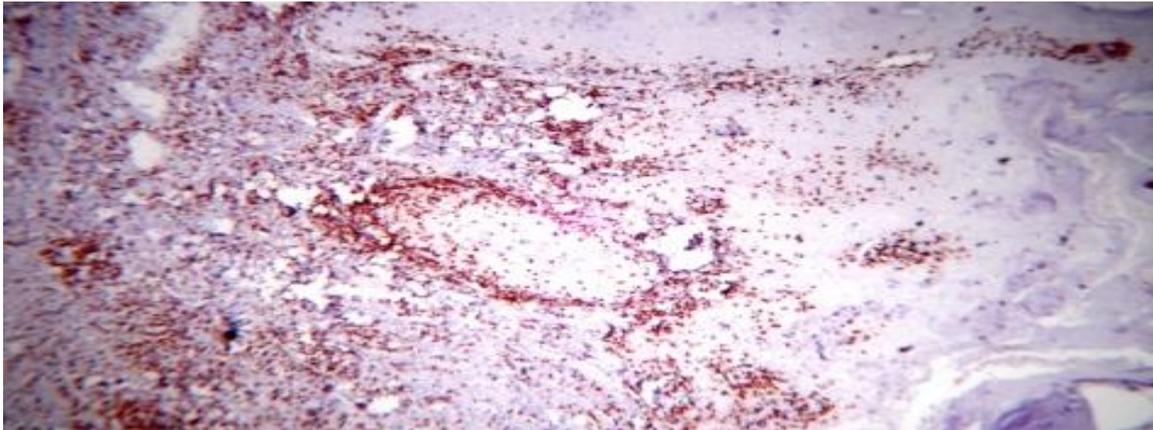


Figure iii: 10X Immunohistochemistry section showing CD 3 Positivity

DISCUSSION

Cutaneous T-cell lymphoma is listed as a "rare disease" by the Office of Rare Diseases (ORD) of the National Institutes of Health (NIH). This means that Cutaneous T-cell lymphoma, or a subtype of Cutaneous T-cell lymphoma, affects less than 200,000 people in the US population. Incidence of mycosis fungoides is only around 1% and it is common in males. B-cell lymphoma is more common than T-cell Lymphoma. When mycosis fungoides and lymphoblastic lymphoma are excluded, PCNHL encompasses peripheral T-cell lymphoma, anaplastic large cell lymphoma, diffuse large B-cell lymphoma and marginal zone lymphoma [1-5].

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