Abstract:
Mycosis fungoides is a relatively rare disease, accounting for 1 of non Hodgkins lymphomas. However, of lymphomas that arise primarily in the skin, it is the most common. We reported a case of Mycosis fungoides in a 32 years male in whom FNAC diagnosis was confirmed by biopsy and immunohistochemistry. Detailed history, thorough clinical examination with high index of suspicion lead us to suspect and diagnose this rare cutaneous lymphoma.

KEY WORDS:
Cutaneous T cell lymphomas, Mycosis fungoides.

INTRODUCTION:
The diagnosis and classification of cutaneous lymphomas remain one of the most challenging areas of dermatopathology. Mycosis fungoides is a clinically and pathologically distinct form of cutaneous lymphomas and mimics a wide range of conditions both clinically and microscopically, hence specific diagnosis is a must.

CASE REPORT:
32 years male presented to the department of pathology for FNAC with the history of multiple nodular swellings all over the body for one year, which started as patchy lesions, with clinical suspicion of cutaneous tuberculosis / fungal infection. On examination the largest nodule was located in right popliteal fossa which measured 3 x 2 cm with focal ulceration, well defined borders, soft to firm in consistency, mobile, non tender and skin over the swelling was not pinchable. No hepatosplenomegaly, and no lymphadenopathy. Basic investigations like complete blood count, peripheral smear study and chest X ray were normal. Mantoux test and sputum acid fast
bacilli were negative. FNAC smears were reported as cellular smears showing small to medium sized round cells with irregular nuclei and scanty cytoplasm in a heamorrhagic background and provisionally diagnosed as cutaneous lymphoproliferative disorder. Incision biopsy sections revealed structure of skin with underlying dermis showing dense infiltrate of atypical lymphocytes around the adnexal structures and also interstitial type of infiltration.

These cells were round with scant cytoplasm and dense nuclei and some of the nuclei showed irregularity of nuclear membrane. Focal epidermotropism also noted. For confirmation of the clonality immunohistochemical studies were done. It showed CD3+VE, CD7-VE, CD20-VE. The final impression was given as cutaneous T cell lymphoma - Mycosis fungoides.

DISCUSSION:
Cutaneous T cell lymphomas represent a heterogenous group of neoplasms which show considerable variation in clinical presentation, histopathology and prognosis. The development of techniques to establish T-cell clonality in infiltrates in the skin has greatly contributed to the diagnosis of these disorders, they must still be interpreted in conjunction with conventional histology and immunohistochemistry.

Mycosis fungoides is a relatively rare, accounting for < 1% of all non Hodgkins lymphomas. However of lymphomas that arise primarily in skin, it is the most common, comprising approxi-
characteristically contain nuclei with dense heterochromatin and elaborately indented (cerebriform) nuclear contours. Involvement of lymphnodes and other organs may occur in late stages of disease. The clinical course is variable and majority of cases are indolent. Clinical staging of Mycosis fungoides involves four categories. Stage I indicates disease confined to skin as localized ( < 10% of body surface, stage IA) or disseminated ( > 10% of body surface involvement, stage IB) patches/plaques. Stage II signifies nodal enlargement without histologic evidence of nodal lymphoma (generally dermatopathic changes only, IIA) or cutaneous tumors (IIB). Stage III implies generalized erythroderma, and Stage IV connotes nodal or visceral dissemination. Prognosis is directly related to extent of disease progression, with stage I and II lesions having an excellent outcome and more advanced presentations (nodules and extracutaneous dissemination) showing aggressive courses. Age above 60 years and elevated LDH are other adverse prognostic indicators. As a terminal event, transformation to a large T-cell lymphoma may be seen. Such cases also show an aggressive behaviour. The numerous variants of Mycosis fungoides are Adnexotropic MF, Solitary pagetoid reticulosis (Woringer-Kolopp disease), Granulomatous MF, Granulomatous slack skin, Poikiloderma vasculare atrophicans, Psoriasiform MF, Bullous/Vesicular MF, Hypopigmented MF, Hyperpigmented MF, MF Palmaris et plantaris, Verrucous/Hyperkeratotic MF, Acanthosis nigricans like MF, Pustular MF, and Ichthyosiform MF. Sezary syndrome is an erythodermic form of MF with neoplastic cells populating the peripheral blood with aggressive behavior.

The list of differential diagnosis are reactive dermatitis, eczema, parapsoriasis, actinic reticuloid, lichenoid diseases, lymphomatoid papulosis, persistent arthropod bite reaction, secondary syphilis, nodular scabies, fungal infection, lichen sclerosus, pigmented purpuric dermatitis, connective tissue disorders, inflamed vitiligo, regressed melanoma, and cutaneous B cell lymphomas. Case history, conventional histology and clonality studies aids towards diagnosis. Treatment for early lesions is topical therapy with steroids/UV light and for advanced lesions with systemic chemotherapy.
FNAC - 40X - single and groups of round cells with open nuclear chromatin and scant cytoplasm

HPE - 40X - Epidermotrophism in foci

HPE - 40X - Dermis showing dense infiltrate of atypical lymphocytes around the adnexal structures and also interstitial type of infiltration

HPE - 40X - Dense infiltrate of atypical lymphocytes around the adnexal structures
CONCLUSION:
Mycosis fungoides is a rare disease with plethora of clinicopathologic manifestations, that mimics wide range of conditions both clinically and microscopically. Hence careful clinical history, thorough clinical examination, conventional histology and ancillary techniques to establish T – cell clonality are must to suspect and diagnose a case of Mycosis fungoides.

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