

CASE REORT

CASE REPORT: A SUCCESSFULLY TREATED MYCOSIS FUNGOIDES WITH CHOP CHEMOTHERAPY REGIMEN

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ABSTRACT

Introduction: Mycosis fungoides (MF) is a rare and aggressive form of cutaneous T-cell lymphoma (CTCL). It typically presents with skin lesions, but can progress to involve lymph nodes, blood and internal organs. Treatment options for MF are limited, and the disease often has a poor prognosis.

Case Presentation: We report a case of a patient who presented with history of itching around the head and neck region of 28 months duration with mixed hypo pigmented and hyper pigmented maculopapular scaly patches. Multiple skin biopsies revealed cutaneous T-cell lymphoma and immunohistochemistry showed CD 20 negative disease. The patient responded to treatment with CHOP (Cyclophosphamide, doxorubicin, vincristine and prednisolone) chemotherapy regimen. Clinical condition was satisfactory on follow up visits.

Conclusion: Early detection and treatment of MF will provide a better prognosis and prolong the patient's life expectancy. This case highlights the significance of recognizing blistering as a prodromal symptom for early detection and management of MF.

Keywords: Mycosis Fungoides, skin biopsy, chemotherapy, Nigeria

INTRODUCTION

Mycosis fungoides (MF), is the most prevalent cutaneous T-cell lymphoma and is clinically divided into three phases: patch, plaque, and tumor. The disease typically progresses slowly over years to decades.¹ Patients in the early stages have a median survival of over 33 years; however, those with advanced stages and

extracutaneous involvement have a median survival of approximately 1.5 years.² Skin involvement begins with the presentation of dermatitis, patches and plaques leading to nodules and systemic dissemination when left untreated. The later stage of the disease is more biologically active. The patch/plaque stage of the disease is the result of medium-sized malignant T-cells while the more advanced

stage develops as a consequence of exclusively dermal involvement of non-epidermotropic malignant T-cells.^{3,4} The presence of small or medium-sized lymphocytes with a cerebriform nucleus is the classical cell presentation of mycosis fungoides.

CASE REPORT

A 53-year-old man presented to the oncology clinic with history of itching around the head and neck region of 28 months duration associated with mixed hypopigmented and hyperpigmented maculopapular scaly patches. There was no history of fever, chills, night sweats, weight loss, no swellings in any part of his body and no palpable cervical and axillary nodes. The patient had presented at the dermatology clinic earlier where he was treated for benign cylindroma of the scalp and neck region.

MANAGEMENT AND OUTCOME

Investigations carried out at the Oncology clinic included full blood count, peripheral blood film, CT chest, electrolytes, urea, LDH, creatinine, uric acid and liver function tests, which were all normal. Viral screens for HIV I & II, Hepatitis B surface Ag and Hepatitis C virus antibodies were negative. Multiple skin biopsies taken revealed cutaneous T-cell lymphoma (MF). Immunohistochemistry showed CD 20 negative. The patient was staged IIB, T3N1M0B0 (American Cancer Society, Version 2025). He was treated with CHOP (cyclophosphamide 500mg/m² day 1, doxorubicin 50mg/m² day 1, vincristine 1.4mg/m² day 1, and prednisolone tablets 40mg/m² daily for 5 days). Each course was given in 21 days. He received 8 cycles of chemotherapy. Evolution was marked by improvement of the symptoms, and the disappearance of the skin lesions except the dyspigmentation of the skin which was still

resolving. Patient's clinical condition was satisfactory on follow up visits for two years.

DISCUSSION

Mycosis Fungoides (MF) is the most common sub-type of cutaneous T-cell lymphoma (CTCL).^{5,6} The disease is characterized by patches, plaques, and tumors that can be intensely pruritic and present in various sizes, shapes, and colors.⁶ The cutaneous findings of MF can mimic other common cutaneous diseases such as atopic dermatitis, psoriasis, and parapsoriasis, making diagnosis challenging, and often requiring serial biopsies.⁷ The histopathological typification as an MF is difficult at the early phases, as the typical characteristics may be absent. Occasionally, multiple biopsies are required to confirm the diagnosis as the differential diagnosis includes various dermatoses and other lymphomas.⁸ Various variants of MF described in the literature are hypopigmented, hyperpigmented, erythrodermic, ichthyosiform, papular, pustular, purpuric, solitary or unilesional, invisible, folliculotropic, syringotropic, anetodermic, verrucous, bullous, dyshidrotic, granulomatous, papillomatous, mycosis fungoides palmaris et plantaris, mycosis fungoides with eruptive infundibular cysts, pagetoid reticulosis or Woringer-Kolopp disease, poikilodermal, interstitial, granulomatous slack skin, and mycosis fungoides with large-cell transformation.⁹ The diagnosis of MF is often delayed by many years from the initial appearance of skin lesions due to its indolent course and diagnostic difficulties.

Biological therapy is a treatment to stimulate the patient's immune system to combat the tumor. It uses substances produced by the body or at the laboratory to stimulate a response or

restore the body's physiological reactions. Interferon is used to treat multiple entities: viral infections, MF, and other tumors. It alters the cell division, slowing down the tumor's growth, giving time to the immune system to eliminate it.¹⁰ Management is based on disease stage and includes skin-directed therapies, systemic therapies, and allogenic stem cell transplantation.^{11,12} Skin-directed therapies are topical corticosteroids, topical chlormethine, topical retinoids, topical calcineurin inhibitors, imiquimod, ultraviolet phototherapy, photodynamic therapy, localized radiotherapy, and total skin electron beam therapy. Systemic therapies include oral retinoids, interferon- α , histone deacetylase (HDAC) inhibitors, low-dose methotrexate, chemotherapeutic agents (pegylated liposomal doxorubicin, gemcitabine, and chlorambucil), and targeted immunotherapy (alemtuzumab, mogamulizumab, and brentuximab vedotin).^{11,13}

The patient completed eight courses of systemic chemotherapy, and he was symptom free. MF is incurable, but many patients experience prolonged periods of disease control. Quality of life is a major objective, in addition to cure, and maximizing periods of remission or stable disease and minimizing treatments and toxicities are two central concerns in clinical care. Treatment is considered palliative for most patients, though major symptomatic improvement is regularly achieved.

CONCLUSION

MF is incurable in most patients, with the exception of those with stage IA disease. However, it is easily misdiagnosed at an early stage due to its nonspecific clinical features and lack of awareness. Hence, a high index of clinical suspicion is required to make early diagnosis. It has worse prognosis for men and

those with raised lactate dehydrogenase. Some Mycosis fungoides clinical variants may have a better prognosis.

CONFLICTS OF INTEREST

The author declares no conflict of interest.

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