

Introduction

Chronic, non-healing lower extremity ulcerations are at known risk for development of malignancy when non-responsive to conservative treatment. There are several types of malignancies that present as ulcerations; one specifically, Mycosis Fungoides.

Mycosis Fungoides, MF, is the most common form of cutaneous T cell lymphoma. It presents in the lower extremities as erythematous, pruritic patches, plaques, and ulcerations or tumors. In the latest stages of the disease, the tumor stage, MF can evolve into a systemic form spreading to lymph nodes, viscera, and the blood.

Diagnosis can be made with tissue biopsy and histopathology, revealing dense infiltrate of lymphoid cells within the dermis. Symptoms of MF are progressive with generalized erythroderma, pruritus, scaling, and ulceration at the late stages. When diagnosed, treatments include UV exposure, topical corticosteroids, chemotherapy, and radiation. Newer technologies and research have also initiated treatment for later and more severe stages of the disease with biologics or extracorporeal photochemotherapy.



Figures : Persistent eczematous or psoriatic like skin rashes with developing ulcerations of the lower extremities secondary to Mycosis Fungoides.

Case Presentation

Our patient initially presented in the outpatient setting with superficial scattered wounds and rash-like lesions. The lower extremity wounds and lesions had waxing and waning occurrences without evidence of causation. The wounds were treated with local conservative wound care modalities as well as with topical medications including anti-fungals and steroid mixtures. The lesions on the lower extremities persisted for over 2 years, and he subsequently developed a similar appearing rash on the upper extremities. The patient was finally persuaded to obtain a tissue biopsy with a dermatological specialist. The results of the tissue biopsy with histopathology were conclusive for tumor stage MF. There was no evidence of lymphoid cell transformation and it was noted that there was no systemic spread of the disease.

Discussion

The three main types or stages of Mycosis Fungoides differ in their histopathology.

The most benign form is a premycotic stage which generally presents as superficial scaling patches. Histopathology reveals chronic non-specific dermatosis with psoriasiform changes in the epidermis. Lesions can look eczematous or may be confused with psoriasis.

A second type, the Mycotic phase or plaque type, presents as infiltrative plaques with polymorphous inflammatory infiltrate within the dermis. Clinically, patients present with erythematous, pruritic, and raised plaques spread over the body surface.

Lastly, tumor stage MF is found to show dense infiltrate with lymphocytes containing cerebriform nuclei throughout the dermis. The tumor nodules build on the plaques which often ulcerate and become necrotic.

Conclusion

Mycosis Fungoides is the most common form of cutaneous T cell lymphoma, commonly affecting males greater than 20 years old, with progressive stages. It is a non-hereditary disease without evidence of specific gene mutation or evidence causes of origination. Diagnosis can be made with biopsy and histopathology of the skin lesions. Our patient did not experience systemic spread of the disease but did require significant treatment therapy including IV exposure and topical corticosteroids. Treatment completion resulted in complete resolution of the disease.

Although our patient was lucky for curative therapy, more severe and systemic forms of MF occur with low levels of cure rates. While research continues to develop to provide greater answers and therapies for the disease, early detection and diagnosis provides the best outcome for patients with Mycosis Fungoides.

Podiatrists treating chronic, non-responsive lower extremity wounds must be aware of the risk of malignancy development and have the responsibility to recognize limitations in conservative local wound care. Physicians should perform tissue biopsy or refer patients to specialists once local wound care has failed in providing progress in healing.

Resources

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There are no financial disclosures associated with this case study.