

A 55-year-old man with pruritic skin nodules

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A 55-year-old Caucasian man hailing from Syracuse, NY, USA presented with pruritic skin nodules for the past six months. The lesions initially started on the back and then spread all over the body. The patient denied fever, chills, loss of weight or appetite; a review of systems was otherwise negative. He had no significant past medical history and was not on any medications. He had never travelled outside the USA to any developing nations. On physical examination, multiple non-tender, fungating, weeping lesions with an erythematous base and multiple plaques were noted on the back, trunk, abdomen, upper and both lower limbs (*figure 1*). Laboratory tests revealed a persistently high leucocyte count ranging between 12,000-17,000/ μ l; peripheral smear did not show any abnormal cells. Hepatic and renal function tests were normal. A punch biopsy of the skin lesion was performed.

Figure 1. Multiple nodules over the torso



WHAT IS YOUR DIAGNOSIS?

See page 471 for the answer to this photo quiz.

DIAGNOSIS

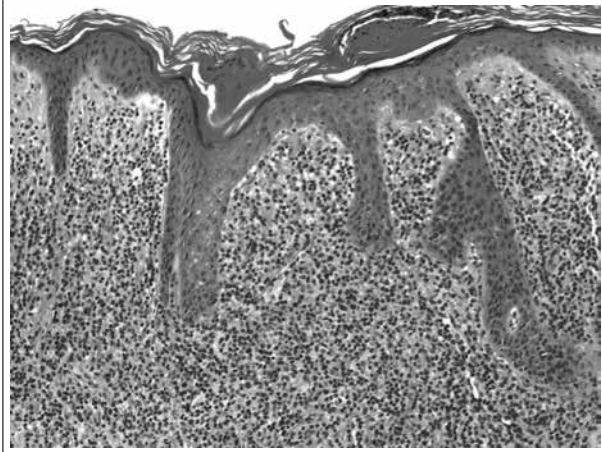
Mycosis fungoides

Punch biopsy of the lesion showed an upper dermal lymphoid infiltrate consisting of medium to large lymphoid cells with irregular or folded nuclear contours, some with prominent nucleoli and a variable amount of cytoplasm (figure 2). Immunohistochemistry showed diffuse strong staining for CD3, CD4 and CD5 with scattered positivity for CD7 and CD8; CD20 highlighted a few background B cells and CD30 was negative. A diagnosis of mycosis fungoides (MF) was made. Radiology was negative for

solid organ involvement. The patient was staged as MF Stage III (T₄ N₀ M₀ B₀) and treatment was initiated with cyclophosphamide, methotrexate, and prednisone. External beam radiation was also used for local control. The patient responded well with marked improvement in the size of the lesions and remains under follow-up.

Mycosis fungoides is an extranodal indolent non-Hodgkin's lymphoma of T-cell origin that is characterised by skin involvement. The incidence of MF is approximately six cases per million per year, accounting for about 4% of all cases of non-Hodgkin's lymphoma. Peak age of presentation is about 55 to 60 years, with a 2:1 male to female ratio.¹ MF may often resemble skin disorders such as eczema, psoriasis, parapsoriasis, photodermatitis, or drug reactions; hence a high clinical suspicion should be maintained. For advanced stage MF, treatment approaches include both local skin directed therapies as well as systemic cytotoxic chemotherapy.²

Figure 2. Skin biopsy HE stain



REFERENCES

1. Bradford PT, Devesa SS, Anderson WF, Toro JR. Cutaneous lymphoma incidence patterns in the United States: a population-based study of 3884 cases. *Blood*. 2009;113:5064-73.
2. Horwitz SM, Olsen EA, Duvic M, Porcu P, Kim YH. Review of the treatment of mycosis fungoides and Sézary syndrome: a stage-based approach. *J Natl Compr Canc Netw*. 2008;6:436-42.