Radiotherapy for unilesional mycosis fungoides

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**Background**

*Mycosis fungoides* is a T-cell cutaneous lymphoma, which in laymen's terms signifies a lymphoma that effects the skin (cutaneous layer). The malignant cell is a T-cell (as opposed to a B-cell, which is the other type of lymphocyte). Mycosis fungoides is a fairly benign disease, with a very long natural history. Most patients present with a rash that will not resolve after local topical treatments. Eventually- in many cases after years- a biopsy is performed and the diagnosis of mycosis fungoides is made.

Although mycosis fungoides runs an indolent course, this lymphoma does have the potential to spread all over the skin as well as to other organs. Despite aggressive medical treatment mycosis fungoides can cause significant medical morbidity and even death. Typically mycosis fungoides presents as more than one skin lesion, but about five percent of patients have a solitary lymphoma focus.

**Methods**

In the September 1, 1998 issue of the *International Journal of Radiation Oncology, Biology and Physics*, Bizhan Micaily and colleagues from Allegheny University report on the efficacy of radiation therapy in the treatment of eighteen patients with unilateral mycosis fungoides. The authors define this condition as a solitary lesion, confined to a single anatomic site without evidence of lymph node involvement or spread to other organs.

Patients ranged in age from 36 to 81 years of age and all but four had been previously treated with topical steroids or anti-fungal creams. One patient received more aggressive therapy with UVB, and topical chemotherapy agents (mechloethamine and carmustine). Radiation therapy was delivered in 180cGy daily doses to a total dose of 3060cGy in all but two patients: One who discontinued treatment after 2200cGy and one who received 4000cGy. The authors treated the single solitary lesion and a rim of surrounding normal skin with high-energy electrons. Maximum lesion diameter ranged from 2cm to 25cm.

**Results**

The radiotherapy was extremely well tolerated. No long-term side effects were noted with the exception of one patient who developed telangiectasia in the treated area. All eighteen patients had resolution of their lesions within in eight weeks after completion of radiation treatments. With a median follow-up period of six years, two patients have recurred, both in areas of skin distinct from the treated area.
Conclusions

The authors conclude that focused radiation therapy is a safe and effective treatment of patients with solitary mycosis fungoides lesions.