Depth, Site Differ for Two Nonmelanoma Cancers

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LUCAYA, BAHAMAS — Whether atypical fibroxanthoma is an entity unto itself or simply a superficial form of malignant fibrous histiocytoma depends upon whether the observer is a clinician or a dermatopathologist.

While the two nonmelanoma skin cancers behave very differently from a clinical standpoint, "the pathologist can't tell the difference except for the depth," Dr. Henry W. Randle noted at a meeting of the American Society for Mohs Surgery.

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Atypical fibroxanthoma (AFX)—also known as "malignant fibrous histiocytoma in situ"—is a rapidly growing and often ulcerated red nodule, typically seen on sun-damaged head and neck areas in elderly men. Although its histology appears ominous, prognosis is usually good. Indeed, of 140 patients, just 6.4% (9) had recurrences after standard excision, usually within the first year. Metastases are rare, usually to a regional node. Mortality is also infrequent, although there have been some recent case reports, he said.

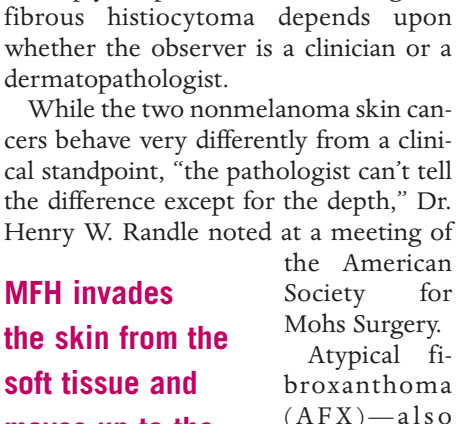
These tumors can be treated with Mohs surgery, after which the recurrence rate is just 6.9%. Malignant fibrous histiocytoma (MFH), in contrast, recurs in 43% following Mohs surgery (J. Am. Acad. Dermatol. 2001;44:656-9).

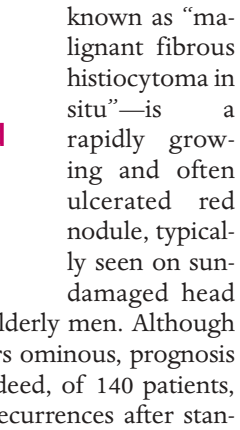
Moreover, MFH invades the skin from the soft tissue and moves up to the surface rather than the other way around, and it is not associated with sun exposure—it typically appears on extremities, not the face and neck. MFH is a much more aggressive tumor than is AFX, with mortality rates of more than one-third at 3.5 years. "They really behave very differently, even though AFX is considered to be the more superficial form of MFH," noted Dr. Randle of the Mayo Clinic in Jacksonville, Fla.

The treatment of MFH requires staging. Wide excision is the standard, because the depth of these tumors makes the use of Mohs surgery questionable. Node dissection, radiation, and chemotherapy should also be considered, he noted.

Research is now focused on finding immunohistochemical markers that will help to distinguish the two tumors. Most are identical in both, with the only known difference thus far being that AFX has a weak positivity to CD74, while MFH is strongly positive. However, even this isn't absolute. Until better markers are found, pathologists typically consider the lesion to be MFH—and recommend aggressive treatment—if it extends into the subcutis and vascular invasion and tumor necrosis are present.

Dermatologic surgeons who treat these tumors need to take extra care beyond what is involved in minor procedures. In a disturbing case report, a surgeon who accidentally impaled his own hand while removing an MFH developed a genetically identical MFH 5 months later (N. Engl. J. Med. 1996;335:1494-7). ■





Malignant fibrous histiocytoma (right) is a much more aggressive tumor than is atypical fibroxanthoma (above), with mortality rates of more than one-third at 3.5 years.

PHOTOS COURTESY DR. HENRY W. RANDLE