Primary Cutaneous γδ T-Cell Lymphoma Should Be Limited to Cases With TCRγδ Expression

I read with great interest the article by Magro and Wang on 5 cases of primary cutaneous γδ T-cell lymphoma with an indolent course. These 5 patients had localized T-cell lymphoma in the subcutis with a less aggressive clinical course, and the authors raised the point that not all patients with primary cutaneous γδ T-cell lymphoma have a poor prognosis. The major weakness of this article is that their diagnosis of γδ T-cell origin was based on a lack of staining for βF1, CD4, and CD8 and possibly by the expression of CD56 in 4 cases. The diagnoses of γδ T-cell lymphoma were not confirmed by the expression of T-cell receptor (TCR) γ or TCRδ. Immunostainings for TCRγδ previously were limited only to fresh or frozen tissue due to technical problems, and accordingly, in earlier studies, cytotoxic T-cell lymphomas with negative staining for βF1 were inferred as having a γδ T-cell origin. However, the lack of TCRβ expression does not always predict γδ T-cell derivation since some T-cell lymphomas might be negative for both αβ and γδ antigen expression, the so-called TCR-silent T-cell lymphomas.

The nature of such tumors is currently unknown and should not be lumped into γδ T-cell lymphomas. Currently, there are commercially available TCRγ and TCRδ antibodies for paraffin section immunohistochemistry and, although a bit technically demanding, the staining results are generally satisfactory. Primary cutaneous γδ T-cell lymphoma recently has been recognized as a new entity, and knowledge of this disease is being accumulated gradually with increasing experience. It would be prudent to keep this entity pure to the cases with unequivocal expression of TCRγδ.

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References