Immediate noninvasive diagnosis of herpesvirus by confocal scanning laser microscopy.


ABSTRACT

In an immunocompromised host, cutaneous herpesvirus infections may be atypical and severe. Bedside microscopic imaging allows rapid diagnosis and prompt therapy. We report the case of an immunocompromised woman whose clinical differential diagnosis included herpesvirus infection. We used confocal scanning laser microscopy (CSLM) for immediate noninvasive bedside detection of histologic patterns diagnostic of cutaneous herpesvirus infection. We found that CLSM revealed the presence of pleomorphic ballooned keratinocytes and multinucleated giant cells in a loose aggregate of keratinocytes, inflammatory cells, and debris. Findings on CSLM were identical to those of conventional histologic examination. Prompt treatment of the immunocompromised patient produced clearing of cutaneous lesions. We conclude that CLSM may be a useful tool in the diagnosis of cutaneous herpesvirus infections.