Immunophenotyping of classical Hodgkin's lymphoma by flow cytometry

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Dear Editor,

Metzgeroth and coworkers recently published an evaluation of the utility of fine needle aspiration and core biopsy for the diagnosis of lymphadenopathy of unknown etiology [1], including an evaluation of the utility of immunophenotyping these two specimen types by both immunocytochemistry and flow cytometry. With regard to the evaluation of Hodgkin's lymphoma by these methods, the authors conclude that flow cytometry "seems to be ineligible for the detection of Hodgkin's lymphoma" [1].

In our experience, while the neoplastic population (the Hodgkin's Reed–Sternberg cell) of classical Hodgkin's lymphoma (CHL) cannot be detected by flow cytometry assays designed to detect B and T cell non-Hodgkin's lymphoma, six- [2] and nine-color [3] reagent combinations are available to detect these cells with high diagnostic sensitivity and specificity. These assays can be used to immunophenotype fine-needle aspirates, core-needle biopsies, and excisional biopsies. We have also recently immunophenotyped CHL in aspirated pleural fluid.

"Conventional" flow cytometry for T cell processes can also be useful in suggesting a diagnosis of CHL [4, 5]. A reactive expansion of CD4-positive T cells with increased

expression of CD45 and CD7 is a characteristic of CHL [6], and this population is only occasionally identified in non-Hodgkin's lymphomas and reactive lymphadenopathies (unpublished data). Therefore, flow cytometry can provide a wealth of diagnostic information regarding the diagnosis of CHL.

Conflict of interest The authors declare that they have no conflict of interest.

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