Diagnosis of Cytomegalovirus Infections

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Sir,

We regret if it can be inferred from our exposition that our team was the first to apply monoclonal antibody technology in the diagnosis of cytomegalovirus infections, as we are completely aware that this has been done previously. However, we are sorry to insist on the fact that the appliance of fluorescein conjugates to peripheral blood lymphocytes has not been, to our knowledge, previously reported in the English language.

Knowing the extensive work done by the group of Groningen in the field of leukocytes stained with immunoperoxidase, our laboratory chose to use fluorescein conjugates by reasons mainly based on personal experience of the laboratory members. A comparison of both methods [1, 2] shows an almost identical sensitivity for both tests (91 and 92%) but a better specificity for fluorescein conjugates (80 vs. 96%), with the total number of blood samples studied being 139 with immunoperoxidase and 320 with fluorescein. However, a real comparison between both methods has still not been done, and further experiences are needed to elucidate this item.

Once that said, we must emphasize that the use of fluorescein did not avoid quantification of the sample if considered necessary. In fact, our specimens were considered positive 'if there were at least three intact cells with specific nuclear fluorescence in each coverslip'. Moreover, further experiences in our group have shown an obvious difference in the number of fluoresceinated cells which appear in each coverslip and the number of consecutively positive samples in patients with overt disease against patients with asymptomatic cytomegalovirus infection [paper in preparation].

Finally I want to remark that, although the very real fact is that already these new diagnostic methods actually afford us with great advances in the clinical management of renal transplant patients, I cannot help disagreeing with the final statement of van den Berg et al. [3] about the presence of any definitive diagnostic choice, as different methods will probably have different places in different circumstances, and because new methods based on new technology are emerging [4, 5] which undoubtedly could enhance the previous ones.

References

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