cannot exclude that our donors’ lymphocyte subset counts returned to normal before 1 year after harvest.

Our data suggest that quantitative deficiency of B, T, and NK cells is not present late after harvest while mild monocytepoyenia of unclear clinical significance may occur.

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Supported by National Institutes of Health (USA) grants no. CA68496 and AI46108.

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To the editor:

Donor lymphocyte infusions for CML: possible effects of age and mobilization

We read with great interest the article on comparison of single-dose and escalating dose regimens of donor lymphocyte infusions for relapse after allografting for chronic myeloid leukemia.1 The observation that graft-versus-host disease can be minimized by staggering lymphocyte infusions, even with a similar final number of cells, is of extreme importance.

Two important aspects of the methodology however are missing. The first is age of the patients and whether age is balanced equally in the 2 groups. Since younger patients have a better prognosis for overall survival and a lower rate of graft-versus-host disease following allogeneic bone marrow transplantation, this information is critical.

Another important aspect of the methodology that should be clarified is whether donors received mobilization therapy or not. Since the bulk dose regimen was done during an earlier time period (August 1990 through November 1995) than the escalating dose regimen (December 1995 through January 1998), it is possible but not stated that preparation of the donor may have varied. In many centers including our own, early protocols involved donor lymphocyte infusions obtained without special preparation of the donor. These early studies were associated with a high incidence of graft-versus-host disease and pancytopenia. Subsequently, in our center and others, donor lymphocyte infusions have been obtained using cells mobilized with G-CSF or with other regimens.2-4

We2 and others3,4 have found that use of G-CSF mobilized harvests contain a large number of lymphocytes, at least equal to those of lymphocyte harvests alone. Mobilization with G-CSF, however, results in other benefits that may improve overall efficacy. First, G-CSF mobilization recruits stem cells that can help to avoid pancytopenia, one of the most common and severe complications of donor lymphocyte infusions when used alone. Second, G-CSF mobilization recruits additional effector cells (cytokine producing cells, antigen presenting cells, and others) transferred with the T-lymphocytes, which could possibly further improve the antileukemia effect. Third, G-CSF polarizes lymphocytes from Th1 to Th2 phenotype, resulting in less cytokine reaction and less graft-versus-host disease.5 Finally, G-CSF mobilization may maintain graft-versus-leukemia effect while preventing graft-versus-host disease through a perforin-dependent pathway, a particularly attractive way to use donor cells. Whether these theoretical benefits of G-CSF mobilization are achievable on a practical level is not yet clear as only small studies have been reported,3,4 and results have varied from favorable2 to equivocal.4

Clarification of these points will help in the interpretation of the study and could provide important information for subsequent studies.

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