patients with AIDS-associated HD. Although our series is small, our results indicate that parameters obtained in the IPFPAHD study (from which HIV-infected patients were excluded) are also useful for predicting the outcome of advanced HD in HIV-infected individuals. However, due to the small number of cases in this series, the results of our study should be confirmed in larger series based on a multicenter databases of patients with AIDS-related HD.

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Mini-ICE regimen allows mobilization of peripheral blood progenitor cells in a patient with chronic myelogenous leukemia failing the ICE protocol

We report the case of a 41-year old patient diagnosed with CML in first chronic phase who achieved successful mobilization of peripheral blood progenitor cells primed with the mini-ICE regimen two years after failing with the ICE regimen. Of note, hematologic and non-hematologic toxicities were milder with the former schedule.

Sir,

Autologous hematopoietic progenitor cell transplantation is an attractive investigational approach for chronic myelogenous leukemia (CML).[1,2] In patients with this disorder, stem cells may be mobilized from marrow by using chemotherapy or growth factors, but the optimal method and timing remain to be adequately defined.[3-8]

A 41-year old male was diagnosed with Philadelphia chromosome-positive CML in chronic phase in December 1992 and began treatment with busulfan. HLA-typing demonstrated the lack of a related or suitable unrelated donor. In July 1994 the patient began therapy with interferon-α (IFN-α) which was stopped because of the absence of cytogenetic response. He was referred to our institution in March 1996 and then received chemotherapy with the ICE regimen,[3] consisting of idarubicin, cytosine arabinoside and etoposide plus glycosylated G-CSF. The patient developed grade 4 hematologic toxicity requiring 45 days to recover > 0.5×10^9/L granulocytes and being dependent on platelet transfusion at discharge, after 58 days of hospitalization. Extra-hematologic toxicity consisted of cutaneous rash, severe mucositis and prolonged neutropenic fever that was managed with intravenous antibiotics for 28 days and amphotericin B for 22 days. Despite eight apheresis procedures only 0.5×10^6 $CD34^+$ cells/kg were collected, with minimal or no cytogenetic remission. In January 1998 he was treated with IFN-α plus cytosine arabinoside and then because no cytogenetic response occurred he was switched to hydroxyurea. Nearly six years after diagnosis, in November 1998, he received chemotherapy with the mini-ICE regimen (same dosage as in the ICE regimen but for only 3 days), plus glycosylated G-CSF. This procedure was initially managed on an out-patient basis, but the patient had to be admitted for 10 days because of an axillary infection. The times to recover >0.5×10^6/L granulocytes and > 20×10^6/L platelets were 22 and 26 days, respectively. Four leukaphereses, starting on day +23 yielded a total of 4.39×10^6 $CD34^+$ cells/kg, without cytogenetic response in the apheresis products.

The patient here described had been treated for six years with several regimens including hydroxyurea, IFN-α and IFN-α plus cytosine arabinoside. A previous mobilization attempt with the ICE regimen had been unsuccessful. More than two years later, a second attempt at progenitor cell collection was decided, using the less intensive mini-ICE regimen.[9] Toler-

ance was excellent and hematologic and non-hematologic toxicities were milder than with the ICE regimen. Moreover, days of neutropenic fever, hospitalization and consumption of antibiotics were reduced. Unfortunately, no cytogenetic response was obtained. To date the patient has been transplanted with full engraftment and no major complications.

Several factors have been associated with the ability and capacity to mobilize hemopoietic progenitor cells in CML such as intensity and type of chemotherapy, time from diagnosis, phase of the disease and previous treatment with IFN-α.[3-8] Our patient had several of these bad prognostic factors in both mobilization attempts. Although more intensive chemotherapy regimens have been associated with better mobilization, in our patient, the milder mini-ICE regimen was associated with successful mobilization and with milder hematologic and non-hematologic toxicities. A similar observation has been recently reported.[9,10] Furthermore, the mini-ICE regimen showed no difference in terms of cytogenetic response or progenitor yield when compared with the ICE regimen.[9,10] Although additional patients are necessary to confirm our data, they suggest that a second attempt to mobilize progenitor hemopoietic cells using the well-tolerated mini-ICE regimen should be tried in patients who have failed to get benefit from other intensive chemotherapy regimens.

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Key words

Chronic myelogenous leukemia, mini-ICE regimen, ICE regimen, mobilization, peripheral blood progenitor cells.

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Lamivudine for the prevention of hepatitis B virus reactivation during autologous stem cell transplantation. A case report

Reactivation of hepatitis B virus (HBV) is a frequent complication during chemotherapy; it may give rise to hepatitis, hepatic failure and death and may prevent further chemotherapy from being administered. We present a case in which the use of lamivudine allowed autologous stem cell transplantation to be performed after a hepatitis flare-up, suggesting a possible role for this drug in preventing HBV reactivation during chemotherapy.

Sir,

Hepatitis B virus (HBV) reactivation following chemotherapy withdrawal may result in hepatitis, hepatic failure and death.[1,2] In fact, immunosuppressive therapy leads to enhanced viral replication and to an increased number of infected hepatocytes. Withdrawal of the drugs results in partial restoration of immunocompetence with subsequent rapid destruction of hepatocytes.[1] It was recently reported that nucleoside analogs such as lamivudine (a reverse transcriptase inhibitor approved for the therapy of HIV infection) is effective in suppressing HBV replication by incorporation of its monophosphate form into DNA, which results in chain termination.[3]

We report the case of a 40-year old male, known to be HBsAg positive for 17 years, without any signs of active hepatitis, who was diagnosed as having mantle cell lymphoma (MCL) stage IIIA, in March 1997. He was treated with six cycles of chemotherapy according to the F-MACHOP protocol[4] between March and July 1997, without any complications.

Thirty days after the end of chemotherapy he presented the full clinical picture of an acute hepatitis, with SGOT at 2,820 U/L, SGPT at 1,525 U/L and total bilirubin at 14 mg/dL.

HBV-DNA (detected by nested polymerase chain reaction as described by Kaneko *et al.*[5]) was positive (having been negative before starting chemothera-