Infectious Agents and Cancer

BioMed Central

Oral presentation

Open Access

Autologous stem cell transplant (ASCT) for AIDS-related lymphoma (ARL)

A Krishnan*, J Zaia, J Alvarnas, N Kogut, J Cai, A Nademanee, J Palmer, N Tsai and SJ Forman

Address: Department of Hematology/Hematopoietic Cell Transplantation, City of Hope National Medical Center Duarte California, USA
* Corresponding author

from 11th International Conference on Malignancies in AIDS and Other Acquired Immunodeficiencies (ICMAOI): Basic, Epidemiologic, and Clinical Research
Bethesda, MD, USA. 6–7 October 2008

Published: 17 June 2009

Infectious Agents and Cancer 2009, **4**(Suppl 2):O14 doi:10.1186/1750-9378-4-S2-O14

This abstract is available from: http://www.infectagentscancer.com/content/4/S2/O14

High-dose therapy with ASCT is an established therapy for relapsed Non-Hodgkins (NHL) and Hodgkin's lymphoma (HL). Randomized trials have shown a benefit for this approach when compared to standard dose salvage therapy for HIV-negative NHL. Since these first trials, transplant-related mortality (TRM) has decreased due to the use of peripheral stem cells and improved supportive care. Concomitantly, the treatment of HIV infection has also improved. Highly active antiretroviral therapy (HAART) has improved hematologic and immune function in HIV positive patients. In addition, with the use of HAART and prophylactic antibiotics, the incidence of opportunistic infections has greatly decreased. This improvement in control of OIs and immunologic function in HIV infected patients due to HAART set the platform for the use of ASCT in patients with high-risk ARL.

Herein we report the long-term follow-up of 32 patients with ARL who underwent ASCT at the City of Hope Cancer Center between 1998 and 2007. Median age at ASCT was 42 years. Histologies included Diffuse large cell n = 16, Burkitts n = 9, Anaplastic large cell n = 2, HL n = 5. The conditioning regimen consisted of CBV (carmustine 450 mg/m2, cyclophosphamide (CY) 100 mg/kg, VP16 60 mg/kg) in 28 patients and FTBI 1200 cGY/CY 100 mg/kg/VP16 60 mg/kg in 4 patients, All patients engrafted at a median of 10 days to an ANC >500 (range 5–19 days). One patient died of regimen-related cardiac toxicity. Other regimen-related toxicities included grade 3–4 hepatic toxicity n = 3, interstitial pneumonitis n = 2. OI's included PCP pneumonia in 2 patients who were not compliant with prophylaxis, CMV infection n = 3, VZV n = 2. One case of treatment related myelodysplasia was seen and the patient ultimately died of myelodysplasia while in remission from his ARL. Median HIV viral load at ASCT was 5726 copies/ml, with 25 patients having an undetectable viral load. Median CD4 count at ASCT was 156 (range 25–1064), which rose to 420 (range 95–1164) at 2-year follow-up. Only 10 patients had an undetectable VL at 2 years. Three patients who were in remission were lost to follow-up after 4 years. Median f/u for the entire group is 47 (range 0.7–104) months. Two-year overall survival is 80 percent (95% CI 66–89) and progression-free survival (PFS) is 81 percent (95% CI 67–90). In conclusion, this large single institution series of ASCT in ARL demonstrates that the procedure has low transplant-related mortality and can lead to long-term remission without deleterious effects on the underlying HIV infection.