

[Abstract 45]

AUTOLOGOUS AND ALLOGENEIC STEM CELL TRANSPLANTATION (SCT) FOR TREATMENT OF WALDENSTRÖM'S MACROGLOBULINEMIA.

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The purpose of this study was to investigate the role of autologous and allogeneic SCT for treatment of Waldenström's macroglobulinemia (WM). 18 patients (age 37-61 years) with WM were treated with myeloablative total body irradiation / high-dose cyclophosphamide and autoSCT (n=14), or nonmyeloablative fludarabine-cyclophosphamide conditioning and alloSCT from HLA-identical donors (n=4). With two exceptions, autoSCT was used as part of first-line treatment, whereas all alloSCT were performed later during the course of the disease. All patients had symptomatic disease due to anemia, lymphoma, hyperviscosity, amyloidosis, or B symptoms. Results: After autoSCT, en-graftment was prompt, but one patient with advanced disease died due to refractory autoimmune thrombopenia 6 months post transplant. Although autoSCT resulted in a strong reduction or normalisation of serum IgM levels in all patients, immunofixation remained monoclonal in all but 2 patients, suggesting persistence of residual disease. With a median follow-up of 39 (2-100) months, median progression-free survival was 69 months, and the 4-year estimate of overall survival was 93% (95%CI 78-100). After alloSCT, hematopoietic recovery initially occurred in all 4 patients. However, a refractory patient developed WM-related secondary pancytopenia. Subsequent infusion of donor lymphocytes induced chronic graft-versus-host disease (GVHD) followed by conversion to full donor chimerism and complete remission of the disease. This patient is alive and disease-free with slowly recovering hematopoiesis 30 months post transplant. Two patients achieved ongoing complete remission in the context of chronic GVHD, and the remaining patient is too early. Apart from GVHD, non-hematopoietic toxicity was low. Median follow-up time is 14 (2-30) months, suggesting a significant therapeutic benefit of SCT in WM. Conclusions: These data show that high-dose radiochemotherapy with autoSCT is effective and may improve the course of patients with WM. Complete eradication of the disease, however, definitely requires more potent intervention. One possibility for this might be graft-versus-leukemia effects conferred by alloSCT.