

REDUCED-INTENSITY ALLOGENEIC BONE MARROW TRANSPLANTATION IN RENAL CELL CARCINOMA-A CASE REPORT

Author: A. Bonini, Azienda Santa Maria Nuova, Reggio Emilia, Italy

Co-author(s): G. Bisagni, Department of Oncology, Reggio Emilia, Italy

C. Boni, Department of Oncology, Reggio Emilia, Italy

L. Gugliotta, Department of Hematology, Reggio Emilia, Italy

Topic: 15: Stem Cell Transplantation - Experimental

Keywords: GRAFT VERSUS TUMOR

A 51 yrs old man (UPN 57) with a clear cell renal carcinoma was allotransplanted at our Institution in May 2001. The diagnosis was made in 1996 with right nephrectomy. In November 2000 multiple metastasis developed in bones, liver and left kidney so the patient received an association of IL-2 and alfa interferon for 4 months but a total body CT-scan showed progression of the disease. Because having an HLA-identical sibling (sister) we decided to treat him with a reduced intensity allogeneic bone marrow transplant that was performed in May 2002. The conditioning regimen consisted of Thiotepa (5 mg/Kg on day -6), Fludarabine (50 mg/day on days -4 and -3) and Cyclophosphamide (30 mg/Kg/day on days -4 and -3). Non manipulated allogeneic bone marrow stem cells were reinfused on day 0 (a total of 2.9×10^8 /Kg mononuclear cells with 1.9×10^6 /Kg CD3+ cells). GVHD prophylaxis consisted of CsA and MTX short course. The clinical course was uneventful and the recovery of PMNs and PLTs was in usual times. On day +22 a bone marrow aspirate was performed to evaluate the karyotypic status and 75% of the metaphases were of donor origin. A total body CT-scan, performed on day +30, showed the reduction of the disease's burden; no signs of acute GVHD were seen and the patient was discharged. On day +50 aGVHD developed: skin grade 2 and liver grade 3 so the patient was treated with high doses of steroids (15 mg/Kg/day); a new marrow aspirate was performed and the karyotypic analysis showed 100% donor's metaphases. During treatment with steroids CMV reactivation with viremia (pp65) but without signs of CMV-disease appeared so the patient received treatment with Gancyclovir that determined the negativization of the CMV antigenemia. During acute GVHD, on day +60, another CT-scan was performed and it showed again reduction of the number and size of the metastases (60% versus before BMT). The GVHD disappeared on day +120. The patient was in good clinical conditions receiving CsA (2.5 mg/Kg/day) and low dose steroids (0.2 mg/Kg/day). In November 2001 (+180) the patient was studied with CT-scan that showed further regression of the metastases and karyotypic analysis that showed persistence of donor metaphases; no GVHD was present. On day +240, after 14 days of unexplained fever and with no signs of GVHD, a CT-scan showed disease's progression (number and size of liver metastases) so the CsA was stopped. After 10 days signs of hepatic GVHD appeared and 1 month after the discontinuation of the CsA a CT-scan showed reduction of the tumor mass. We conclude that probably this case may represent the confirmation of a graft versus tumor effect because the presence of GVHD coincided always with the regression, even if not complete, of the metastases and also the discontinuation of the immunosuppressive therapy has coincided with a reduction of the tumor. Now the follow-up without CsA will give us informations about an eventual complete remission of the disease.

