

H0-13 Non-myeloablative allogeneic peripheral stem cell transplantation in multiple myeloma: 2 years experience in a single center

SY Ma, AKW Lie, WY Au, CS Chim, Eric Tse, YL Kwong and R Liang
Department of Medicine, Queen Mary Hospital, University of Hong Kong.

Multiple myeloma (MM) is considered non-curable by chemotherapy alone and the role of standard allogeneic stem cell transplantation (allo-SCT) remains controversial because of relatively high treatment related mortality (TRM). Non-myeloablative allo-SCT is associated with satisfactory engraftment but less toxicity which is essential in the heavily pretreated elderly patient with multiple myeloma. We report our 2 years experience on 10 MM patients receiving non-myeloablative allogeneic PBSC transplantation using fludarabine (30mg/m²)/TBI (150 Gy) as conditioning. 8 patients had full HLA-matched siblings donor, 1 had a one major HLA-antigen mismatched siblings and the last one had a full HLA-matched daughter donor. All patients had active disease before SCT with satisfactory engraftment before D21. No TRM was observed during the whole follow up period. Acute GVHD developed in 3 patients (2 at grade III and 1 at grade IV) and 7 patients had chronic GVHD (3 acute GVHD cases included). At a median follow up of 1 year, 2 patients had complete remission (CR), 3 patients had partial response (PR), 3 patients had no response (NR) and 2 patients were too early for assessment. No relapse case was observed. Only one NR patients had donor lymphocyte infusion (DLI) and 2 NR patients had thalidomide. In conclusion, non-myeloablative allo-SCT in multiple myeloma is effective with less toxicity and TRM. However, a longer follow up period and more cases are required before a definite conclusion can be reached.

H0-14 Traditional Chinese medicine: effect on bone marrow and peripheral blood cell counts and enzyme induction

Ambekar CS, Kumana CR, Liang R and Cheung BMY.
Department of Medicine, The University of Hong Kong.

Herbal Medicines are important source of pharmacologically active compounds. While studying metabolism of chloramphenicol succinate (CAPS) by bone marrow, we observed that marrow and blood sample obtained from a single marrow donor (A) contained large amounts of an enzyme that metabolized CAPS to 3 metabolites within 15 min of incubation. While other 2 donors (B and C) marrow also metabolized CAPS to 3 metabolites after 3 hours incubation and in remaining 72 marrow samples CAPS was metabolized to one metabolite after 3-24 hrs incubation. Both marrow and blood cell counts (WBC, RBC, Platelets) were also high in this donor (A) as compared to all other marrow donors' marrow and blood cell counts. This donor was pre-treated with TCM (Siu Fung San) for his allergic reaction 10 days prior to marrow donation. Some *in vitro* cell culture studies were also conducted to see its effects on cell proliferation and CAPS metabolising enzyme. We could not see any enzyme induction effect by using *in vitro* method. It is possible that when given orally herbs may undergo metabolism and active components may be distributed to each tissue. These active components may induce cell proliferation, enzymes and protein synthesis. We conclude that "Siu Fung San" a Traditional Chinese Medicine taken prior to marrow and blood donation by our one marrow donor may be responsible for his high bone marrow and peripheral blood cell counts and large amount of succinate dehydrogenase.