The 9 pts with polyostotic disease received a combined therapy. Pts were irradiated to bulky lesions or to sites with high risks of fracture, with a mean dose of 37 Gy (30–45 Gy). Five pts were treated with ADM containing CT (4 CR and 1 PR). Two of them relapsed and died after 15 and 131 mo, while 3 pts are alive and disease-free after a median follow-up for the entire group of 80 mo. Four pts that did not receive ADM did not achieve CR and died of disease progression. Survival rate is 80% with a median follow-up of 43 mo for pts with LD and 34% with a median follow-up of 80 mo for pts with AD.

Neither bulky lesions, soft tissue involvement, pathologic fracture nor systemic symptoms were associated to worse prognosis. The use of ADM was associated to a lower incidence of local or systemic relapse in all pts and to a higher survival rate among pts with AD. A high CR rate was obtained with a radiation dose >40 Gy, while all treatment failures were observed in the group treated with a dose <40 Gy. Pts treated with a partial irradiation of the bone did not relapse. The impact of local lymph nodes irradiation and the advantage of whole bone irradiation or partial bone irradiation remain undefined.

Although the small number of cases, we can conclude that the use of ADM-containing CT and a radiation dose > 40 Gy on involved sites is mandatory in the treatment for PLB, independently of stage.

787 POSTER

MULTIPLE CYCLES OF AGGRESSIVE CHEMOTHERAPY FOR RELAPSED LYMPHOMA

G. Goss, J. Szer, A. Grigg
Bone Marrow Transplant Service, Royal Melbourne Hospital, Melbourne 3050, Australia

Patients with non-Hodgkin's lymphoma and advanced Hodgkin's disease who relapse after first line therapy have a poor prognosis. Around 30–40% of patients with disease sensitive to salvage chemotherapy achieve long term survival after subsequent high dose chemotherapy (HDCT) and autologous bone marrow transplantation (ABMT). In addition, for patients undergoing HDCT, the use of peripheral blood progenitor cells (PBPC) results in faster neutrophil and platelet recovery compared with bone marrow.

Based on the premise that a single cycle of HDCT may be suboptimal, we piloted a regimen combining 5 days of infusional ara-C and etoposide with bolus doses of cyclophosphamide and methotrexate and high dose oral dexamethasone (MADEC) as a salvage therapy for patients with relapsed lymphoma. Following MADEC all patients received granulocyte colony stimulating factor to assist in mobilisation of PBPC, and to reduce the incidence of febrile neutropenia.

Twenty-five patients with relapsed lymphoma (19 with intermediate grade non-Hodgkin's lymphoma, 6 with Hodgkin's disease) received a total of 45 cycles of MADEC. All had demonstrated response to prior induction chemotherapy (22 CR, 3 PR) with median duration of response of 6 months (1–60 mos). There was one toxic death. The MADEC regimen was intensely myelosuppressive. All patients had nadir granulocyte counts of $>0.5 \times 10^9$/l, resulting in hospitalisation for febrile neutropenia after 35 of 45 cycles. Platelet and packed cell transfusions were required after the majority of cycles. Non-haematological toxicity was mainly mucositis and was generally mild.

Of 24 evaluable patients 8 achieved CR after MADEC and 10 achieved PR (6 pts with residual masses had gallium scans, 5 were negative). Patients responding following cycle 1 underwent leukapheresis after the neutrophil nadir. Median number of leukaphereses was 2 (1–4). Median number of CD34+ cells mobilised was 2.75×10^6/kg ($0.5–22.8 \times 10^6$/kg) and median number of CFU-GM was 68.4×10^4/kg ($0.5–697.5 \times 10^4$/kg). In responding patients a second course of MADEC was given to achieve maximal reduction of disease bulk prior to transplantation. Sixteen patients proceeded to HDCT with PBPC support. All patients engrafted successfully with median days to ANC $< 0.5 \times 10^9$/l of 12 days (9–16 days) and to platelets 20×10^9/l independent of transfusion of 10 days (7–42 days). Overall median survival of the entire group and of patients undergoing HDCT has not been reached, with median follow up 14 months (6–44 mos.) Disease free survival in the HDCT group is median 13 months (6–44 mos).

Conclusion: The MADEC regimen was useful for identifying patients with chemosensitive disease who may benefit from HDCT and for maximal reduction of disease bulk prior to the procedure. Combination with G-CSF resulted in mobilisation of adequate numbers of PBPC to support engraftment after HDCT. The therapeutic benefits of this regimen relative to less intensive regimens prior to transplant warrants evaluation.

788 POSTER

COMPARISON OF LIPOSOMAL ENTRAPPED DOXORUBICIN (LED) WITH BLEOMYCIN AND VINCRISTINE (BV) IN THE TREATMENT OF AIDS-RELATED KAPOSI'S SARCOMA

M. Harrison[1], D. Tomlinson[1], M. Spittle[2], S. Stewart[1]
[1]*Department of Oncology, St Mary's Hospital, London, U.K.*
[2]*Department of Oncology, Middlesex Hospital, London, U.K.*

Between July 91 and Sept 94 106 patients were commenced on treatment with BV or LED (Dox SL LTI) on 123 occasions. Treatment was initiated with LED on 68 occasions with 56 patients and with BV on 55 occasions with 51 patients.

Both groups of patients were comparable in terms of age, Karnofsky score and ACTG poor prognosis criteria (JCO: 7(9). 1201–1207. 1989).

In total 585 cycles of chemotherapy were given (BV-268, LED-317). Median number of cycles for BV is 5 (1–15) and median number for LED is 4 (1–14). Overall response rate for BV is 65.4% (36/55) with 58.2% (32/55) partial responses (PRs) and 7.2% (4/55) complete responses (CRs). Overall response rate for LED is 72% (49/68) with 64.7% (44/68) PRs and 7.3% (5/68) CRs. There is no statistical difference in response rate between the two groups (Chi squared test).

Median response duration measured from completion of chemotherapy is 8 weeks for BV (4–48) and 8 weeks for LED (1–24). (Kaplan Meier and Log Rank assessment). Median cycle to response is 3 for BV (1–6) and 2 for LED (2–4).

In summary LED offers an equivalent response rate and duration of response to conventional chemotherapy for AIDS related KS.

789 POSTER

ORIGIN, FUNCTION, AND PROGNOSTIC SIGNIFICANCE OF SOLUBLE CIRCULATING CD44

R. Ristamäki, S. Jalkanen, K. Grön-Virta, M. Salmi, H. Hagberg, K.-M. Kälkner, H. Joensuu
National Public Health Institute, Department of Oncology and Radiotherapy, University of Turku, Finland
Department of Oncology, University of Uppsala, Sweden
Department of Oncology and Radiotherapy, University of Helsinki, Finland

The serum level of soluble CD44 (s-CD44) has been reported to change in parallel with response to treatment in lymphoma, but its origin, function, and prognostic value have not been known. Both peripheral blood and tumour lymphocytes were able to secrete s-CD44 in a cell culture. When Burkitt lymphoma cells were transfected with human CD44 and transplanted into SCID-mice, human s-CD44 appeared in the blood circulation. s-CD44 was able to adhere to hyaluronate and fibronectin, suggesting that it retains biological activity. S-CD44 was measured from the sera of 123 patients with non-Hodgkin's lymphoma by dotblotting, and high levels of s-CD44 turned out to be associated with high serum levels of lactate dehydrogenase and thymidine kinase, high histological grade of malignancy, and poor outcome. In conclusion, s-CD44 is biologically active and partially originates from lymphoma cells.

790 POSTER

REHABILITATION OF LONG-TERM SURVIVORS AFTER HODGKIN'S DISEASE: A CROSS-SECTIONAL STUDY IN CALVADOS, FRANCE

F. Joly[1], M. Henry-Amar[1], A. Tanguy[1], O. Reman[2], A.M. Peny[1], B. Vié[1], J.Y. Génot[1], X. Troussard[2], A. Busson[1], M. Leporrier[2]
[1]*Registre Général des Tumeurs, France*
[2]*C.H.R.U. Hématologie Clinique, 14021 Caen, France*

With the growing number of patients surviving cancer, there is an increasing concern with their long-term adaptation. A cross-sectional study was performed in 1995 focusing on physical, psychological, social and familial sequelae in Hodgkin's disease patients who survived 4 years or more from initial treatment. Patients were selected from the Calvados General Cancer Registry if they were treated during the 1978–1990 period, did not develop a second malignancy, remained free of disease since 01.01.1991, and were aged 18 years or more at interview. Information was taken from a self questionnaire sent by mail. The EORTC QLQ-C30 core questionnaire was used to evaluate the quality of life. Clinical data were obtained from medical records.

At March 1st, 1995, 107 patients (male/female ratio 1.4; mean age 32 years, range 3 to 78) were selected of whom 67% presented with early stages, 38% with B symptoms. Initial therapy consisted of irradiation (RT) in 29%, combination RT and chemotherapy (CT, mostly MOPP) in 66%, and CT alone in 5%. The mean follow-up was 123 months