953

T-GVHD INCIDENCE IN PATIENTS WITH HODGKIN'S DISEASE TRANSFUSED WITH NON RADIATED BLOOD PRODUCTS AT THE INSTITUTO NACIONAL DE ENFERMEDADES NEOPLASICAS.LIMA-PERU

SANTILLANA S.,ALDECOA F.,FALCON S.,SOLIDORO A.,GARCIA J., VALLEJOS C.

Transfusion associated Graft versus Host Disease (T-GVHD) is an infrecuent, but very severe complication in oncological patients.At the Instituto Nacio- nal de Enfermedades Neoplasicas(INEN)in Perú,4 episodes of T-GVHD were diag- nosed in the last 2 years,two of them were detected in Hodgkin's Disease (HD), one in Non Hodgkin's Lymphoma and one in Acute Lymphocytic Leukemia.To determine the relative risk of developing T-GVHD in patients with HD after receiving unirradiated blood products between January 1991 and December 1992, 84 HD cases were evaluated,30 were females and 54 were males. Median age was 22.7 years. 21/85 received some type of non irradiated blood products transfusion, mainly packed red blood .Transfusion average per patient was 1.51.T-GVHD incidence in this population was 1.57% (2/127).One case was a 5 years old girl,and the other a 34 years old,woman. Latency period was 10 days in both cases; symptomatology was: high fever,rash and later jaundice, mucositis and marrow aplasia.T-GVHD episodes duration was 20 days in both cases with 100% mortality. Diagnosis was stablished clinically, epidemiologically and pathologically in both cases. Causes of death were septic shock and bone marrow aplasia. The relative risk of developing T-GVHD among our HD patients is 1.5%,similar to other series published in the literature. The only effective meassure to avoid it is to radiate the blood products to be used. It's necessary to identify the high risk population in order to prevent them adequately from the developing T-GVHD.

954

MULTIPLE FRACTIONS PER DAY WITH ACCELERATION (MF) IN EXTENDED RADIOTHERAPY OF PATIENTS WITH HODGKIN'S DISEASE (HD)

L.I.Koritova, N.V.Ilyin
Central Research Roentgen-Radiological Institute, St.Petersburg, Russia

We have performed prospectively randomized trials initiated in January 1986 testing new schedule of extended radiotherapy - MF with acceleration versus conventional fractionation (CF) for clinical stages I-III HD. All 229 primary patients (on the whole III stage- 163 patients; 71,2%) ageing from 15 to 54 had histologically proven HD. Radiation therapy was delivered with 15 MeV linear accelerator utilizing a total dose 40-44 Gy regardless of scheme of fractionation. The patients were randomly assigned fractionation's schedules (113-MF; 116-CF). The considerable decrease of relapses (for 9,8%), acute radiation pneumonitis (for 20%), period of radiotherapy (for 12,4 days in average) were established in patients with HD stages I-III with MF - schedule as compared of patients with CF - schedule.

955

SUBTOTAL BODY IRRADIATION IN HODGKIN'S DISEASE

A.L.Dudarev, L.I.Koritova, N.V.Ilyin
Central Research Roentgen-Radiological Institute, St.Petersburg, Russia

Subtotal body irradiation (SBI) was used in 56 patients with advanced Hodgkin's disease (HD) aged 15-77.The patients were treated at the 15 MeV linear accelerator, 1.5 Gy/min with no shielding was employed.Single dose 1-1.5 Gy to total dose 4-6 Gy (lung corrected) was given to the trunk midplane during 7-10 days. Courses of SBI were used in 6 patients twice and in 3 patients thrice. 50 patients showed good immediate results compared with the same of COPP-chemotherapy course: discontinuance of B-symptoms (fever, night sweats), diminuation of lymph nodes; decrease and disappearance of lung involvement; improvement of general condition. SBI is an effective method of radiotherapy in chemotherapy-resistant cases and can be used as an additional supportive care in patients with advanced HD.

956

KARYOTYPE AND PROGNOSIS IN NON-HODGKIN LYMPHOMAS

Ch Marosi, H Pirc-Danoewinata, A Chott, E Onderka, E Schlögl, U Jäger, F Thalhammer, GC Steger, G Locker, I Michl, H Hanak & R Heinz.
Division of Oncology, Departement of Internal Medicine I, 1090 Vienna, Austria

Successful cytogenetic analysis was available from 70 adult patients with various newly diagnosed biopsy proven Non-Hodgkin lymphomas (NHL) prior to chemo- or radiotherapy. A t(14;18)(q32;q21) was found in 24 patients, including 5/9 (30%) with centroblastic (CB), 6/8 (75%) with centrocytic (CC) and 3/7 (43%) with centroblastic-centrocytic (CBCC) lymphoma. According to previous studies, in follicular lymphomas increasing karyotypic complexity correlated with high grade histology, aggressive clinical course and shortened survival. Regardless to histologic diagnosis, in NHL where aberrations of chromosome 7 (n=14) or deletions of the short arm of chromosome 17 (n=14) were found the affected patients showed a high tumor burden and high serum LDH (median 657+167 U/l). However a significant difference of survival times could not be ascertained. Additional aberrations of chromosome 3, mostly del(3)(p21-25) were found in 14/19 (74%) of these patients. Three patients with aberrations of 11p with possible involvement of the gene coding for CD44 suffered from abdominal bulky tumors, showed poor response to therapy and short disease free survival.

Non-Hodgkin's Disease

957

EXPRESSION OF THE RETINOBLASTOMA GENE IN HUMAN HIGH GRADE NON-HODGKIN'S LYMPHOMAS

R Weide[1], M Tiemann[2], K-H Pflüger[1], H Köppler[1], B Parviz[1], H-H Wacker[2], K Havemann[1] & MR Parwaresch[2]
[1]Department of Haematology/Oncology, Philipps-University Marburg, Baldingerstrasse, 3550 Marburg, Germany
[2]Department of Haematopathology, University Kiel, Niemannsweg 11, 2300 Kiel, Germany

44 primary high grade NHL, the B-lymphoblastoid cell line IM-9 and the NHL cell line WSU-NHL were studied for RB structure by Southern blotting and for RB-expression by Northern blotting, Western blotting and immunocytochemistry. In all experiments freshly cryopreserved material was used. Southern and Northern experiments were performed with the 0.9kb and 3.8kb RB-cDNA probe. For the detection of p105 two different anti-p105-monoclonal antibodies were used in immunocytochemistry and Western blotting experiments.

No RB mRNA and no p105 could be found in IM-9 cells. 21 high grade NHL samples (48%) showed no p105 expression. In the subgroup of centroblastic lymphomas p105-expression was absent in 8 out of 20 (60%) and in Burkitt's lymphomas in 5 out of 8 (62.5%) of the tumours tested.

Thus p105 expression is absent in 48% of high grade NHL, particularly in centroblastic and Burkitt's lymphomas, suggesting that inactivation of RB may play a crucial role in the pathogenesis of high grade NHL.

958

PERIPHERAL BLOOD INVOLVEMENT IN NON-HODGKIN'S LYMPHOMA (NHL) DETECTED BY CLONAL GENE REARRANGEMENT AS A BIOLOGICAL PROGNOSTIC MARKER

Brada M, Hiorns LR, Nicholls J, Sloane JP, Horwich A, Ashley S. Academic Unit of Radiotherapy & Oncology, Institute of Cancer Research and Royal Marsden Hospital, Downs Road, Sutton, Surrey, UK

Peripheral blood (PB) from 67 patients with NHL was examined at initial diagnosis for the presence of circulating lymphoma cells by DNA hybridization using immunoglobulin and T cell receptor gene probes. Clonal gene rearrangement was found in 31% (21/67) patients and correlated with clinical stage, histological grade and bone marrow involvement. The presence of lymphoma cells in PB was an independent prognostic factor for progression-free (P-F) survival in all 67 patients with a relative risk of progression of 2.7 (95% CI:1.3-5.6). It was not a significant predictor for survival. In patients with intermediate & high grade NHL the detection of lymphoma cells in PB was a significant prognostic factor for P-F survival and survival only on univariate analysis. The 3 year P-F survival was 17% in patients with circulating lymphoma cells compared to 75% if these were absent ($p<0.05$). The presence of lymphoma cells in PB may represent a biological marker associated with poor disease control and sensitive techniques of detection should form part of prospective studies in NHL.