Proffered papers

Hematological and related malignancies

768 ORAL

HODGKIN'S DISEASE (HD), CLINICAL STAGES (CS) IA-IIIB WITHOUT BULKY TUMOR: INTERIM RESULTS OF THE GOELAMS RANDOMIZED H90-NM PROTOCOL

P. Colonna, V. Delwail, B. Desablens, M. Gardembas, L. Sensebe, J.L. Harousseau, C. Gardin, P. Casassus, M. Simon, P.Y. Le Prise, C. Ghandour, Y. Frilay, A. Lemevel, J.M. Andrieu, The GOELAMS
Oncology-Hematology, Hôpital Laënnec, 75007 Paris, France

From 2/90 to 6/93, 195 adult patients (pts) with HD, CS IA-IIIB without bulky tumor (nodes <10 cm; mediastinal tumor/thoracic width ratio <0.45; no simultaneous lumbo-aortic and pelvic involvement) were randomized to receive 3 monthly courses (only 1 in peripheral CS IA) of ABVD-MP (D1 and D15, mg/m^2: adriamycin 25, bleomycin (BLM) 10, vinblastin (VBL) 6, dacarbazin 375, methylprednisolone (MP) 120 = arm A, 101 pts) or EBVM-MP (D1 and D15, mg/m^2: epirubicin 30, BLM 10, VBL 6, methotrexate 30, MP 120 = arm E, 94 pts). CT-responding pts were given (sub)total nodal and splenic RT (involved fields 40 Gy, non-involved 30 Gy). Pts characteristics: M 110, F 85; age <= 40 148, >40 47; CS I 56, II 117, III 22; A 152, B 43; histology: LP 21, NS 128, MC 30, LD 1, UN 15. Complete remission rates after CT and RT were 81% (A 83 pts, E 74 pts) and 95% (A 96 pts, E 90 pts) (P = NS); 10 pts relapsed (A 1, E 9, $P < 0.05$) and 4 pts died (A 1, E 3).

769 ORAL

HIGH DOSE THERAPY AND AUTOLOGOUS BONE MARROW TRANSPLANTATION FOR RELAPSED OR REFRACTORY HODGKIN'S DISEASE: THE IMPACT OF TOTAL BODY IRRADIATION AND INVOLVED FIELD RADIATION THERAPY

J.C. Poen, R.T. Hoppe, S.J. Horning, K.G. Blume
Stanford University, Stanford, California, U.S.A.

One hundred patients with relapsed/refractory Hodgkin's disease (HD) were treated with either high dose carmustine(BCNU)/etoposide(VP16)/cyclophosphamide(Cy) or fractionated total body irradiation (fTBI)/Vp16/Cy prior to autologous bone marrow transplantation (ABMT). In addition, 24 patients received involved field radiation therapy (RT) prior to (n = 18) or following (n = 6) ABMT. With a median follow-up of 30 months, 3-year actuarial freedom from relapse (FFR) and overall survival (OS) for the entire group are 65% and 63% respectively. By multivariate analyses, factors associated with recurrence were pleural disease (P = 0.009), pulmonary metastases (P = 0.004) and a poor response to cytoreductive therapy (P = 0.003). FFR and OS following BCNU/VP16/Cy (67% and 62%) or fTBI/VP16/Cy (60% and 60%) were similar (P = 0.51 and P = 0.49). A median RT dose of 30 Gy (range 14.4 Gy–45 Gy) was given to 67 sites in the 24 patients. Local failure occurred within 4 irradiated sites (6%) in two patients (8%). In patients with Ann Arbor stages I–III disease (n = 62), RT was associated with a trend toward improved FIR (92% -vs- 67%, P = 0.09) and OS (86% -vs- 59%, P = 0.13). Among patients not previously irradiated (n = 39), RT was associated with a significant improvement in FFR (85% -vs- 55%, P = 0.05) and OS (93% -vs- 54%, P = 0.03). Treatment related mortality (including 2nd malignancies) was similar with or without fTBI (15% -vs- 14%) or RT (17% -vs- 13%). In conjunction with high dose therapy and ABMT, RT is well tolerated, effectively controls local/regional disease, and may improve survival in selected patients.

770 ORAL

BREAST CANCER (BC) AFTER HODGKIN'S DISEASE (HD). ANALYSIS OF 35 CASES

B. Cutuli[1], A. De la Rochefordiere[2], Y. Graic[3], B. De Lafontan[4], J.M. Dilhuydy[5], T.D. N'Guyen[6], P. Bey[7]
[1] *Center Paul Strauss, 67085 Strasbourg, France*
[2] *Other Regional French Cancer Centers, Paris* [3] *Rouen,* [4] *Toulouse,* [5] *Bordeaux,* [6] *Reims,* [7] *Nancy, France*

Introduction: The second cancers represents the most important problem among the survivors of HD. A possible link with chemotherapy (CT) and radiotherapy (RT) is suggested but genetic and immunologic factors may also be involved.

Material: In seven Cancer Centers, we found 35 women, previously treated for HD, who developed 37 BC. The median age at diagnosis of HD was 25 years, with 12 less than 20 years. HD stage was : I = 3, II = 21, III = 5, IV = 4, NS = 2. 33 women received supradiaphragmatic RT with doses varying from 35 to 45 Gy. 16 women received CT (mainly MOPP). The median interval between the diagnosis of HD and BC was 16 years. According to TNM, we found : 2 T0, 10 T1, 12 T2, 4 T3, 6 T4 and 3 Tx. 32 were ductal infiltrating carcinoma, 2 medullary, 2 *in situ* and one fibrosarcoma. Axillary involvement was present in 51% of cases. Mastectomy was performed in 23 cases, a radiosurgical conservative treatment in 12 and exclusive radiotherapy in 2. Fourteen women underwent chemotherapy.

Results: 7 women had local relapse of BC and 15 had metastases (40%). Three had contralateral metachronous BC. 17 women are in complete remission for both diseases; 15 died of BC. Three women died of intercurrent disease.

Conclusion: The women treated for HD, especially before 20 years, seem to have an increased risk of subsequent BC. According to other reports, we confirm that these BC are frequently aggressive, with rapid evolution and high risk of bilaterality. Consequently, a regular mammographic follow-up is necessary to detect these lesions earlier, to allow a better prognosis and a possible conservative treatment.

771 ORAL

IS RADIOTHERAPY CURATIVE FOR STAGE I–II LOW-GRADE FOLLICULAR LYMPHOMA?

M.P. MacManus, R.T. Hoppe
Radiation Oncology, Stanford University; Stanford, CA 94305, U.S.A.

Outcome was reviewed for 180 stage I and II pts with follicular small cleaved cell (fsc; n = 103 [57%]) or follicular mixed small cleaved and large cell lymphoma (fmx; n = 77 [43%]), treated at Stanford 1961–1994. Pts received 35–50 Gy to one side of the diaphragm (involved or extended fields) or both sides of the diaphragm (total or subtotal lymphoid XRT). There were 74 (41%) stage I and 106 (59%) stage II pts. M/F ratio was 1.2. Median age was 53 yrs. Staging laparotomy (lap) was performed in 45 pts (25%) and 34 (19%) had extranodal lesions. Median follow-up (f/u) was 7.7 yrs; longest f/u was 31 yrs. Actuarial survivals at 5, 10, 15 and 20 yrs were 82%, 63%, 43% and 35% respectively. Actuarial freedom from relapse (FFR) was 55%, 44%, 43% and 35% respectively, at the same intervals. Median survival after relapse was 5 yrs. Only 5 of 47 pts at risk for more than 10 yrs after XRT have relapsed (latest relapse 21 yrs post XRT). Survival was worse for pts aged >40 yrs (P = 0.053) and worse still for pts aged >60 (P = 0.0001). FFR was also worse for pts aged >60 (P = 0.019). Multivariate analysis of prognostic factors indicated that youth and staging lap were most strongly associated with long survival and that treatment on both sides of the diaphragm and staging lap were most strongly associated with prolonged FFR. These data suggest that XRT alone is potentially curative for early-stage low-grade follicular lymphoma. Although >50% will relapse within 10 yrs, only 10% of pts at risk may relapse later. Early