

1334

ORAL

**Breast cancer (BC) after cured Hodgkin's disease (HD)**

B. Cutuli<sup>1</sup>, C. Borel<sup>1</sup>, F. Dhermain<sup>2</sup>, S.M. Magrini<sup>3</sup>, Th. Wassermann<sup>5</sup>, J.A. Bogart<sup>6</sup>, M. Provencio<sup>4</sup>, B. de Lafontan<sup>2</sup>, A. de Larocheferdiere<sup>2</sup>, Y. Graic<sup>2</sup>, P. Kerbrat<sup>2</sup>, C. Alzieu<sup>2</sup>, E. Teissier<sup>2</sup>, J.M. Dilhuydy<sup>2</sup>, H. Mignotte<sup>2</sup>, M. Velten<sup>1</sup>. <sup>1</sup>Centre Paul Strauss, Strasbourg, France; <sup>2</sup>Other French; <sup>3</sup>Italian; <sup>4</sup>Spanish; <sup>5</sup>American Centers, United States

**Purpose and Methods:** We report 119 women treated for HD between 1960 to 1988. The median age at diagnosis of HD was 24 years; 74 women (62.2%) received exclusive RT, and 45 had previous CT.

**Results:** The 119 women developed 133 BC. The median interval between HD and BC was 15 years. DIC represents 81.6% of the cases, but pure DCIS was found in 10.4% of the cases, and other types in 8%. Among the infiltrating carcinoma the axillary involvement rate was 53.4%.

Mastectomy was performed in 77 cases, and lumpectomy without or with RT in 12 and 32 cases. Four others were treated exclusively by RT, five by CT and one only by Tamoxifen; 18 (15.1%) patients developed local recurrence and 41 (34.5%) metastases.

The five-year disease-specific survival rate is 61% (pN0: 91%, pN1-3: 66%, pN > 3: 0%).

**Conclusion:** Our study define two types of secondary BC: one very aggressive with high rate of lymph node involvement and the second more favourable, with often DCIS subtype and with a longer "latent period".

Consequently, the young women treated for HD should be carefully monitored, especially by mammography. For these secondary BC a conservative treatment in sometime feasible.

1335

POSTER DISCUSSION

**Towards the most intensive group CHOP regimen for high-grade non-Hodgkin's lymphomas (NHL)**

A. Santoro, F. Latteri, M. Balzarotti, H. Soto Parra, P. Salvini, G. Brambilla, V. Ginanni, G. Biancofiore, R. Bufalino. *Istituto Clinico Humanitas, Rozzano-Milano, Italy*

**Background:** as previously reported (ASCO, 1997), it has been possible to increase of almost two times the dose-intensity of CHOP by utilising G-CSF.

**Methods:** in order to further increase the DI and dose-size of both doxorubicin (ADM) and cyclophosphamide (CTX) a second study was undertaken in 20 pts with high grade NHL. The dose of ADM was fixed at 75 mg/m<sup>2</sup>, like in the previous study, while the dose of CTX started at 1750 mg/m<sup>2</sup> and was increased of 250 mg/m<sup>2</sup> in cohorts of at least 3 pts in the absence of dose limiting toxicity (DLT). G-CSF was given s.c. at 300 µg/m<sup>2</sup> from day 7 to day 12. Cycles were restarted every 2 wks instead of the classic 3 wks. DLT was considered as either grade IV neutropenia > 7 days, or grade III thrombocytopenia ≥ 7 days or any grade IV thrombocytopenia, or non-haematological toxicity other than alopecia.

**Results:** DLT was observed in 3/4 treated pts at 2250 mg/m<sup>2</sup> of CTX. Relative (RDI) and Actual received Dose Intensity (ADD) at 1750 and 2000 every two wks were compared to MTD of 2750 mg/m<sup>2</sup> every 3 wks of the previous study.

CTX mg/m <sup>2</sup>	pts n	wks	CTX: RDI	ADI	ADM: RDI	ADI
Standard CHOP	3	1			1	
2750	7	3	3.7	3.59	1.5	1.49
1750	9	2	3.5	3.39 (2.86-3.61)	2.25	2.18 (1.84-2.33)
2000	7	2	4.0	3.35 (2.01-4.06)	2.25	1.92 (1.54-2.25)

**Conclusion:** according to these data the dose level of 1750 mg/m<sup>2</sup> with doxorubicin 75 mg/m<sup>2</sup> every two wks must be considered as the most intensive CHOP regimen. This schedule is safe to administer on an outpatient basis.

1336

POSTER DISCUSSION

**Analysis of efficacy and long-term toxicity in the treatment of early-stage Hodgkin's disease with four cycles of ABVD followed by limited radiotherapy**

A. Baio<sup>1</sup>, P. De Vecchi<sup>1</sup>, P. Franchini<sup>1</sup>, E. Brusamolino<sup>2</sup>, F. Lunghi<sup>2</sup>. <sup>1</sup>I.R.C.C.S. Policlinico San Matteo, Radioterapia Oncologica, Pavia; <sup>2</sup>I.R.C.C.S. Policlinico San Matteo, Ematologia, Pavia, Italy

The authors reports on the results and long-term events of a combined modality approach consisting of a brief chemotherapy (CT) and limited radiotherapy (RT) without staging laparotomy in patients with early stage

Hodgkin's disease. In fact the use of combined modality therapy in early-stage Hodgkin's disease allows smaller field and lower dose of irradiation, reduces the risk of relapse compared to radiation alone and can spare staging laparotomy.

**Methods:** Seventy-eight patients, with median age of 33 years (range 15-64), were included in a prospective study: 20 with clinical stage I and 58 with stage II; 6% had B symptoms, 5% subdiaphragmatic disease, 60% had mediastinal enlargement and 12% bulky disease. The median follow-up was 56 months. The treatment program consisted of 4 cycles of standard chemotherapy (ABVD regimen), followed by standard RT to involved sites in 44 patients, or to involved and contiguous sites of disease in 34 patients; RT total dose ranged from 30 to 36 Gy to uninvolved and involved sites, respectively; bulky disease received a boost up to 44 Gy. Gonadal function was assessed in women by ormonal tests and menses evaluation. An estrogen-progesterone combination was used in fertile women, for ovarian protection, while most of young men had their semen cryopreserved.

**Results:** The whole treatment program was reached in a median of 6.2 months (range 5-9.8). The complete remission (CR) rate, achieved after 4 ABVD in 69 patients was 88%, 98% after the adjunctive RT. The 5-year relapse free-survival (RFS) is 97%; two of the 3 relapsing patients reached only a partial remission after ABVD chemotherapy. The 5-year overall survival is 98%; two patients die: one of disease progression and one of a small cell lung cancer. Long-term toxicity included pulmonary fibrosis with symptomatic interstitial disease (2 cases), one case of dilated cardiomyopathy with cardiac failure (all patients had received mediastinal irradiation), and hypothyroidism requiring replacement therapy in 5 cases. Fertility was preserved in young women and four normal pregnancy were registered. No cases of secondary leukemia occurred.

**Conclusion:** The combination of a short CT regimen with 4 cycles of ABVD and limited irradiation was effective and produced 97% RFS at 5 years, in early stage Hodgkin's disease patients without staging laparotomy. A prolonged monitoring of potential long-term sequelae of therapy and evaluation of their impact on quality of life are mandatory in this curable setting of patients.

1337

POSTER DISCUSSION

**Salvage chemotherapy for Hodgkin's disease - A seven-drug containing regimen with and without stem cell transplant**

M. Rahal, S. Bazarbashi, A. El-Weshi, M. Raja, C. Pai, M. El-Foudeh, A. Al-Sayed, A. Ezzat, D. Ajarim, E. Ibrahim. *KFSH&RC, Riyadh, Saudi Arabia*

**Purpose:** Between 1993 and 1997, 38 PTs with relapsed or refractory Hodgkin's Disease were given salvage chemotherapy with Etoposide, Solu-Medrol, Cytarabine and Platinum (ESAP) alternating with Ifosfamide, Methotrexate and CCNU (IMC) q.28 days.

**Material:** M/F:26/12; median age: 21 years; range: 14-60. initial stage: IB:1 PT, IIA/IIB:2/3, IIIA/IIIB:3/7, IVA/IVB:3/19. Pathology: NS:22, MC:11, LP:4, unknown:1. Bulky mediastinum:13 Patients (PT). Initial chemotherapy: MOPP/ABV(D):24, COPP/ABV(D):6, MOPP:5, ABVD:1, other:2. Initial radiation in 11 PT. Response to previous chemotherapy: NR:2; PR:14, CR < 1 year:14; CR > 1 year:8. Visceral involvement in 23/38 PT, and 13 had B symptoms. Number of prior regimen: 1:28; 2:6; 3:4. Number of relapses: 1:24; 2:9; 3:5. Median number of cycles of salvage given 5 (1-8).

**Results:** 34 evaluable PT. NR:11; PR:6; CR:17. Starting January 1996 all responders (below 60 years) of age underwent high dose chemotherapy and stem cell transplantation. 14 PT have been transplanted, 12 with PBSC (1 combined with ABMT), 1 ABMT, 1 allogenic. With follow-up ranging from 12 to 36 months, 8 PT of the transplant group are alive NED (5 were in CR after ESAP/IMC, 2 in PR, 1 NE). 3 are alive with disease and 3 died (2 PD, 1 from toxicity). Among 20 PT treated with ESAP/IMC only and with a follow-up from 24 to 72 months, 5 PT are alive NED, 3 alive with disease and 12 died.

**Conclusions:** ESAP/IMC is an effective regimen in the salvage of Hodgkin's Disease.

1338

POSTER DISCUSSION

**Anthracyclin-related leukaemias after breast cancer (BC) adjuvant/neoadjuvant treatment: Dose relationship?**

S. Delaloue<sup>1</sup>, E. Cvitkovic<sup>1</sup>, P. Cottu<sup>2</sup>, J.L. Misset<sup>1</sup>. <sup>1</sup>Hop Paul Brousse; <sup>2</sup>Hop Saint Louis, France

Secondary acute leukaemias (SAL) related to anthracyclins used in the neoadjuvant/adjuvant treatment of BC are an emerging major concern.