losing survival benefit. In poor prognosis group the aim is to obtain the highest remission rate at the lowest side effects of therapy.

528 ORAL

RESULTS OF HM91 PROTOCOL OF THE FRENCH PEDIATRIC ONCOLOGY SOCIETY (SFOP) FOR CHILDREN WITH LARGE CELL ANAPLASIC LYMPHOMA

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On behalf of the SFOP

Between February 1991 and September 1994, 43 patients newly diagnosed with a large cell anaplastic lymphoma (LCAL) were enrolled in the HM91 study. After a cytoreductive phase COP course (Vincristine-Cyclophosphamide-Prednisone) were administered 2 induction courses (COPADM) with methotrexate, cyclophosphamide, adriamycine, vincristine and prednisone. Maintenance treatment consisted of 8 alternate courses of VEBBP (vinblastine, VPI6, bleomycine and prednisone) and séquence 1 (vincristine, methotrexate, cyclophosphamide, adriamycine and prednisone. Total length of the treatment was 7 months. There were 21 boys and 22 girls aged 3 to 16.5 years (median age 10 years). Immunohistochemistry data are available for 41 pts with positivity for Berh2 in 41/41, for EMA in 32/36. Cytogenetic analysis was performed in 19 cases and revealed a t (2; 5) in 14 cases. Lymphadenopathies were present in 42/43 patients, skin lesions in 34, visceral involvement in 22 and bone marrow involvement in 4. No patient had CNS involvement at diagnosis; 26 patients had B symptoms. Initial chemotherapy resulted in a complete remission in 39/43 patients. 2 patients failed to achieve CR and died, 2 patients achieved CR with the second line treatment and are alive disease free with 36 and 42 months follow up. 8 patients relapsed 7 to 12 months after diagnosis (3 of them died, 5 are alive with no evidence of disease), 33 patients are in first complete remission (including the 2 patients in CR only after the second line treatment) with a median follow-up of 20 months. Event free survival is 72% and crude survival 84% with a median follow up of 20 months.

529 ORAL

COMBINED POSTOPERATIVE RADIO-CHEMOTHERAPY OF MALIGNANT BRAIN TUMOURS IN CHILDHOOD: RESULTS OF THE PILOT STUDY HIT '88/89

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Objective: Improvement of survival with postoperative additional chemotherapy before radiation therapy in medulloblastoma, ependymoma and glioma.

Materials: Chemotherapeutic agents: Procarbazine, Ifosfamide/VP16, MTX, Cis-Platinum, ARAC.

Patients; Eligible patients: n = 147, Follow-up: 6 years, mean 4 years.

Results: Medulloblastoma (n = 94): 26/39 patients with residual tumour or meningeal dissemination responded to chemotherapy (CR/PR). In complete response the 5-year eventfree survival was 54% (±15%), in poor/non-responder 23% (± 9%) ($P = 0.02$). However, for all patients with residual tumour or meningeal spread the 5 year eventfree survival was 32% (± 7%), without residual tumour 58% (± 8%)($P = 0.004$).

Ependymoma (n = 21): 5 year eventfree survival with residual tumour: 30%, without residual tumour: 53%

Glioma (n = 22): 5 year eventfree survival WHO Gr III: 57%, WHO Gr IV: 0%

Conclusions: In medulloblastoma additional chemotherapy improved the survival for patients with residual disease who responded to chemotherapy. However, for the total group of patients with or without residual disease the survival was equal to postoperative radiation therapy only (i.e. SIOP II). Due to a low number of patients it is difficult to draw conclusions from our data on survival in ependymoma and glioma. At present, however, there is no firm evidence for an improvement of the therapeutic outcome.

530 ORAL

CLINICAL ASPECTS AND SURGICAL TREATMENT OF POST-CHERNOBYL CHILDREN'S AND ADOLESCENT'S THYROID CANCER

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The cases of children's and adolescent's thyroid cancer treated in the Surgical Clinic of the Institute of Endocrinology and Metabolism during the period from 1980 to 1994 were reviewed retrospectively. 199 patients with thyroid cancer were operated on. The analysis has shown a substantial increase in thyroid cancer incidence among children in Ukraine after the Chernobyl accident (1990 to 1994) which differs by its clinical characteristics and a high level of aggression. Most of the thyroid cancers were well-differentiated papillary forms. The method to be used for treatment is total thyroidectomy with radical excision of cervical lymph collectors followed by ablation of thyroid remnants with ^{131}I, if necessary, and life-long suppressive therapy with thyroid hormones.

531 ORAL

RESULTS FOLLOWING RADIOTHERAPY AND/OR CHEMOTHERAPY OF ORBITAL RHABDOMYOSARCOMA

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The results of treatment of previously untreated patients younger than 17 years with primary localized rhabdomyosarcoma of the orbit were analyzed. In a multicenter study 46 patients with stage I–III orbital RMS were treated with chemotherapy (CT) (VACA: 1981–1985 or VAIA: 1986–1990)after initial tumour excision or biopsy. Patients with primary unresectable tumours were stratified after preoperative CT according to the result of second look surgery or degree of tumour volume reduction either to receive radiotherapy (RT) with 40 or 50 Gy using conventional fractionation, or 32 or 54.4 Gy (1.6 Gy/fraction BID). Sixteen patients were not irradiated, whereas 30 had RT. Forty patients were eligible for analysis. Local recurrence occurred in 0/1 stage I, 2/5 stage IIA, and 2/7 stage III patients without RT. The numbers in stage I to III after RT were: 1/1, 1/3 and 4/23, resp. Five year disease free survival (DFS) is 78% in the first study and 74% in the subsequent study. There is no significant difference in local control and DFS in patients treated with conventional or accelerated fractionation. The study demonstrates good local control with acceptable toxicity using either conventional or accelerated fractionation.

532 POSTER

MALE FERTILITY FOLLOWING CHEMOTHERAPY IN CHILDHOOD

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205 patients treated by chemotherapy in the Institut Gustave-Roussy for childhood cancer between 1963 and 1990 have been assessed for fertility by serum basal FSH-LH level (200 pts), sperm count (22) and/or testicular biopsy (4) after the end of puberty and 1 to 21 years (m: 8 y) after the end of chemotherapy. They received various polychemotherapy including cyclophosphamide (129 pts), procarbazine (42 pts), CCNU (37 pts), D actinomycin (80 pts), doxorubicin (138 pts), methotrexate (69 pts), vincristine (182 pts). 127 pts (62%) had normal, and 78 abnormal results.

A multivariate analysis showed that pubertus status of the children at time of the treatment had no influence, but that cyclophosphamide, procarbazine and CCNU were significantly associated to abnormal results. 32 pts treated only with D-actinomycin, vincristine + adriamycine had normal results.

533 POSTER

INFECTION WITH HEPATITIS B, C, AND HIV IN CHILDREN WITH CANCER IN TURKEY

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Turkey is considered to be an area of endemic hepatitis B virus (HBV) infection. Prevalence of HBV infection in the pediatric age group is 9.8%. Pediatric cancer patients are at an increased risk for hepatitis