survival figures were obtained from pts who were able to complete the full course: all 42 pts· 44%, 26%; St II: 40%, 40%; St III–IV: 45%, 24%. Gr I–II: 53%, 41%; Gr III: 37%, 11%. Residual tumor at primary surgery: none: 75%, 56%; < 2 cm: 49%, 31%; > 2 cm: 26%, 7%. Negative SLL/microscopic disease at SLL: 63%, 31%. Macroscopic disease at SLL: 19%, 10%. The survival probability of 11 pts who were irradiated following clinical CR achieved by chemotherapy (CT) without SLL was 46% and 34% at 5 and 10 years, respectively.

Conclusions: 1) Residual tumor at primary cytoreductive surgery and SLL outcome are both prognosticators of survival. 2) In view of the promising results, the integration of consolidation RT as part of the multi-modality management of advanced ovarian carcinoma, especially in complete responders to CT, should be investigated in Phase III studies.

554 PUBLICATION

Use DNA flow cytometry (DNA FCM) in diagnosis and prognosis of serous boderline tumors and high grade ovarian cancer

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Purpose: The aim of this study was to assess the possible use of DNA FCM in the daily clinical practice for differential diagnosis and prognosis of serous papillary boderline tumors (SPBT) and high grade serous adenocarcinoma (HGSA) of ovary.

Methods: DNA FCM (FACScan, Becton Dikinson; software Multicycle, Phoenix Flow Systems, USA) was performed in 9 cases of SPBT, 23 HGSA cases.

Results: The proliferative rate (18.9 ± 1.2%) of aneuploid SPBT was higher than diploid ones (7.1 ± 2.2%) and same parameters of HGSA (16.6 ± 2.4%) as well as higher and same proportion of S phase cells (7.2 ± 0.6% versus 3.5 ± 0.3% and 8.1 ± 1.3%). In these cases the only morphological differentiation between aneuploid SPBT and HGSA was very difficult. Therefore, cytopathologist, using the data of DNA FCM, may think of HGSA instead of SPBT. It was found that aneuploid HGSA occurred in 87.5% and diploid ones in 12.5% cases. The analysis of distant results has shown that patients with aneuploid tumors have higher chance of progressive disease.

Conclusion: Thus, our data has demonstrated the obvious value of DNA FCM for improving accuracy in diagnosis and prognosis of SPBT and HGSA.

555 PUBLICATION

Palliative complex treatment of the patients with ovarian cancer by using of radiation component

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Purpose: To detect the role and the place of radiation therapy in complex treatment of the ovarian cancer patients and to improve the results of palliative treatment.

Methods: 86 patients with II–III stages of ovarian cancer (T2–3 No-1 Mo) at the age between 17 and 69 were treated. Telegammatherapy has been conducted using "Rocus" apparatus from two opposite fields 16 × 16 cm in static regimen and 6 × 16 cm – in a mobile one. Single site dose was 2–2.2 Gy, total – 35–40 Gy. Radiation component has been used in complex therapy of the patients with nonascitic forms of ovarian cancer with operation at a full volume (panhysterectomy with omentectomy), in residual tumors in a small pelvis, but without metastases to the organs.

Results: Radiation treatment has been conducted on the background of intraperitoneal and intravenous PCT (platidiam, adriamycin, endoxan, vincristine). Use of radiation component in complex therapy gave more prolonged remission as compared to the combined method (operation + PCT): 42.6 ± 3.8 months and 34.8 ± 3.6 months, respectively. 5-year survival in complex treatment of the patients with II–III stages of ovarian cancer was 62.4% as compared to 45.7% in the combined treatment.

Conclusion: Inclusion of the radiation component under the above conditions to postoperative therapy of the ovarian cancer patients promotes prolongation of the clinical remission and survival.

Cancer in children

556 ORAL

Metastatic osteogenic sarcoma (OS) at diagnosis. Study of 73 cases from the french society of pediatric oncology (SFOP) between 1980 and 1990

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In order to assess the prognostic value of a good histological response (GR) in metastatic OS at diagnosis, 73 patients (pts) were retrospectively studied.

Patients: 36 boys, 37 girls, 3 to 19 years (med 13) of age. The site of the primitive tumor (PT) was distal femur (40), proximal humerus (12), proximal tibia (11), other (10). 66 pts had pulmonary metastases (8 only one metastasis, 41 multiples pulmonary sites, 14 associated with bone, 3 combined sites). 5 pts had only bone metastasis. 2 pts had combined sites (liver, regional node).

Treatment (tt): All pts received chemotherapy (CT) with (48) or without (25) Cisplatinum (CDDP); pts without CDDP received methotrexate and adriamycin. Local tt was possible in 60 pts: radiotherapy only in 18 pts, surgery in 52 pts. The histologic response is evaluable in 41 pts: 21 GR, 20 poor response (PR). In 30 pts, lung metastases were resected. 36 pts did not have thoracotomy.

Results: 23/73 pts went CR for PT and metastases; 15/23 pts relapsed. 43 pts died 2 months (mo) to 63 mo after diagnosis (med 15 mo), 17 are lost for follow-up with tumor. 13 pts are alive in CR with a median follow-up of 7 y; none of the alive pts had bone metastasis. Overall survival for all pts is 15%, GR 50%, PR 5%.

Conclusions: 1) this study confirms the poor prognosis value of bone metastasis at diagnosis. 2) the survival depends on the achievement of CR and histological GR (12 alive pts/21 GR, 1 alive/20 PR). 3) 4/8 pts with only 1 pulmonary metastasis are alive; the 4 dead had no surgery for their PT. 4) surgery is necessary for the PT.

557 ORAL

Adaptation of treatment to clinical presentation in stage 4S neuroblastoma. Results of the SFOP NBL90 study

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Purpose: Clinical presentation of patients (pts) with 4S neuroblastoma (NB) is heterogeneous, and standardization of treatment (Tt) is difficult. We established a Tt scheme adapted to severity of respiratory symptoms and to evolution of metastases.

Methods and Patients: After diagnosis and staging, pts with respiratory distress received 1.5 Grays/day (d) for 3 d by external beam radiotherapy (RT) on the liver. Chemotherapy (CT) was associated, or preceded RT, if necessary and made of Vincristine 0.05 mg/Kg/d D1 and Cyclophosphamide 5 mg/Kg/d D1 to D5 (CO) for 6 courses; in case of progression, 2° line CT was given, consisting of 2 courses of VP16-Carboplatinum. Pts with no respiratory distress were monitored as outpatients and were planed to receive CO and/or RT in case of disease progression. In all cases, the primary was surgically removed 4 to 6 months after diagnosis. 65 pts diagnosed between 01.90 and 03.96 (36 M and 29 F) are evaluable. Age at diagnosis was 0 to 196 d (med 49 d). Primary was located in the abdomen in 56, in the mediastinum in 3, in the neck in 1 and not found in 5 pts. Metastatic sites were: subcutaneous tissue (12), liver (59), bone marrow (16).

Results: The 6 pts without liver disease are alive – 23/59 pts with liver disease received no CT during the first 2 months after diagnosis: 20 had spontaneous remission, and 3 were treated for progression; all are alive. Among the 36 pts who received early treatment, 2 had liver RT only, 12 CO only, and 22 RT ± CO ± 2° line CT. Only 3/16 pts treated by CO first had a response. 2° line CT was needed in 8/11 receiving CO + RT. 9 responses were observed in 11 patients receiving VP16-Carboplatinum. 14 events and 10 deaths were observed. Overall survival of the cohort is 84% ± 7 with a median follow-up of 65 months.

Conclusions: VP16-Carboplatinum should be used for pts with 4S NB, who need a Tt.