prospectively in a randomized fashion at Marmara University Hospital, Department of Pediatrics.

Thirty four (37.8%) female and 56 (62.2%) male patients were recruited. Demographical data and the primary diagnosis of the patients were found to be the same for both of the antibiotic regimen groups. The primary diagnosis of the patients were the like following: 38 (42.2%) acute lymphocytic leukemia, 24 (26.7%) malignant central nervous system tumor, 9 (10%) neuroblastoma, 6 (6.7%) Wilms tumor, 6 (6.7%) rhabdomyosarcoma, 2 (2.2%) Burkitt lymphoma, 2 (2.2%) malignant liver tumor, 1 (% 1.1) Hodgkin's disease and 1 (1.1%) nasopharyngeal carcinoma.

Microbiologically proven febrile neutropenia, fever of unknown origin and clinically defined febrile neutropenia were 24 (26.7%), 56 (62.2%) and 10 (11.1%) respectively. The median days till discharge and days of antibiotic treatment were 9 and 7 days in cefepim group, and 8 and 7 days in ceftazidime group respectively ($p > 0.05$). Median days of defervecence of fever was 2 days for both of the groups ($p > 0.05$). The response to antibiotic regimens at hour 72 was similar for both groups.

Drug modifications were done in 19 (50%) patients in cefepim group, 19 (50%) patients in ceftazidime group, and 38 (42.2%) patients in the overall study group.

Cefepim is a new drag. This drug's usage in childhood febrile neutropenia has to be investigated. According to the preliminary results from our study, it is found to be as efficacious as ceftazidime in childhood febrile neutropenia. Studies done on larger scales are needed in order to determine if one of the regimens is more efficacious than the other.

417 PUBLICATION

Evaluation of neo-adjuvant chemotherapy for efficacy of retinoblastoma treatment

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Purpose: Generally accepted images of retinoblastoma treatment in Stage T2–T4 are surgery (enucleating and exenterating) and further chemoradiotherapy. This protocol doesn't prevent relapses of retinoblastoma which are reached 15–20% on the average. Neo-adjuvant chemotherapy was order for decrease of primary tumor dimensions and prevent from metastasis.

Methods: Neo-adjuvant chemotherapy (Cyclophosphamide – Endoxan, ASTA Medica, – 200–300 mg/m^2 i.m. every other day ' 7, and Etoposid, Bristol Myers Squibb, 100 mg/m^2 i.v. inf. days 1, 3, 5) was performed in 9 patients with retinoblastoma, Stages T2–T4b. One child had metastasis of Tung and mediastinal lymph nodes.

Results: Tumor regression to finish of neo-adjuvant treatment was average 40–50%. There were no relapses during 2 years after the comlex treatment.

Conclusion: Neo-adjuvant chemotherapy with using of Cyclophosphamide and Etoposid in Stages T2–T4b of retinoblastoma promotes to increase efficacy of treatment for retinoblastoma in children.

Soluble tumour markers

418 POSTER

Progression markers in serum of patients with multiple myeloma

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Multiple Myeloma (MM) accounts for 10% of hematological cancer. It is primarily a disease of the elderly that has proved relatively difficult to treat and leads often to a period of ill health associated gradual deterioration, bone pain, repeated infection and death. The responsiveness of MM to Chemotherapy and oral Enzyme therapy (chymotrypsin, trypsin, papain) was demonstrated in early clinical studies (Sakalova et al. Vnitr-Lek. 1994;40:98–103). We compared the remission time of MM patients after chemotherapy and after enzyme + chemotherapy retrospectively. The remission time was ($p < 0.0001$) longer in enzyme treated patients stage II. We determined soluble NF-Receptors p55 and p75, beta2-Microglobulin and IL-6 in the sera of 198 patients with MM stage I–III: before therapy, after chemotherapy (MOCCA/VMCP) or after chemotherapy + enzyme treatment and in 67 age matched healthy volunteers. The serum concentrations of sTNF-Rs and beta2M were significantly ($p < 0.05$) elevated in patients stage II and III before therapy. sTNF-Rs and beta2M correlate ($r = 0.886$). The levels of these serum proteins were lower after chemotherapy and significantly lower after chemo + Enzyme therapy (beta2M: $p < 0.1$; p55: $p < 0.05$; p75: $p < 0.05$).

Enzyme- + chemotherapy prolongs remission times in stage II MM patients and reduces the concentration of progression markers sTNF-R and beta2M.

419 POSTER

CA 15-3 and CA 27-29 serum markers in monitoring breast cancer patients

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Purpose: In order to define the most useful tumor marker panel in breast cancer patients follow-up and in monitoring treatment response, serological levels of CEA, MCA, CA 15-3 and CA 27-29 were evaluated in 220 patients.

Methods: 180 patients were NED after primary treatment, and 40 had metastases at first diagnosis time; in 4 years follow-up 30 out of NED patients relapsed, and were than included in the group of metastatic patients submitted to anticancer therapy. Serum markers were determined every 3–6 months in follow-up patients, as well as before, during and after treatment in metastatic patients.

Results: Overall sensitivity was: CEA 40%, MCA 35%, CA 15-3 79%, CA 27-29 70%, with the highest percentages and mean values in liver (CA 15-3 95%; CA 27-29 72%) and bone (CA 15-3 70%; CA 27-29 70%) localization. Combination of CA 15-3 and CA 27-29 improved sensitivity in bone lesions (85% vs 80%). In loco-regional relapses only association with CEA increased sensitivity (60% vs 40%). CA 15-3 and CA 27-29 values increased on average 3 months before relapse's clinical diagnosis. In treated patients there was a better correlation with clinical courses of disease for CA 15-3 and CA 27-29 (both 81%) compared to the others determined markers.

Conclusion: By our observation the combined serial measurement of CA 15-3 and CA 27-29 appears to be the most favourable both in disease progression diagnosis in treatment monitoring as indicator of therapy effectiveness.

420 PUBLICATION

Effects of navelbine (NVB) on the electrophoretic profile of hyaluronidase (HAase) on Lewis lung carcinoma (LLC)

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Purpose: Hyaluronic Acid (HA) and HAase, its degrading enzyme, are present in extracellular matrix and body fluids. HA degradation produces small fragments, involved in angiogenesis and tumor progression and metastasis. Elevated HA and/or HAase levels have been reported in certain tumors. NVB shows an inhibitory effect on LLC growth. We studied if this effect is partly associated with changes in HAase activity.

Methods: Twelve $C_{57}B1$ mice were transplanted with 2×10^7 LLC cells/mouse. Six of them were treated with 1.0 mg/kg/day of NVB from day 1 to 9. The rest were controls. All mice were sacrificed on the 14th day and serum samples were analysed electrophoretically using a sensitive substrate (HA) – polyacrylamide gel technique. HAase activity was detected by the presence of the unstained (clear) bands on the gel.

Results: NVB produced 73% inhibition of tumor growth and no mortality. The electrophoretic banding pattern of HAase activity in controls exhibited several unstained bands of different molelcular sizes. In NVB-treated mice the absence of the low molecular size fragments decreased the number of unstained bands and subsequently the total activity of HAase.

Conclusion: The absence of low molecular fragments of HA, which are reported to be angiogenic, may relate to LLC inhibition after NVB treatment. Thus, HA and/or HAase altered activity may reflect responsiveness to chemotherapy and may prove to be a useful serum marker in monitoring treatment.