1252 PUBLICATION

Detection of human Parvovirus B19 in the CSF of ALL Egyptian children patients

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Background: Parvovirus B19 virus might have a role in the pathogenesis of acute leukaemia. The virus may no longer be present in the serum at the time of diagnosis, but could be present at other sites as the cerebrospinal fluid (CSF). B19 virus is known to cause meningoencephalitis, chronic B19 meningitis has been reported in a child with ALL. It is possible that infection may play a role in initiation of the genetic rearrangements allowing proliferation of the malignant clone.
Aims: to investigate the association of acute parvovirus B19 infection with newly diagnosed acute lymphoblastic leukeamia and its effect on the humoral and cellular immunity.
Methods: Cerebrospinal fluid (CSF) samples collected from children patients with acute lymphoblastic leukaemia (ALL) at diagnosis (n = 20) were analyzed for parvovirus B19 DNA by nested polymerase chain reaction. Serum IgG was measured by neplemetric method. Evaluation of the immune cells CD4/CD8 was done on flowcytometry. None of patients was encephalitic or had evidence of central nervous system leukaemia. In addition, samples from patients with benign intracranial hypertension (BIH) (n = 10) were tested as control group.
Results: Patients age mean 4±2.0 (range 2–7ys). Four leukaemic cases (Pre B-ALL) were significantly positive to viral DNA in their CSF compared to the rest of the cases ($p < 0.001$). All four patients were significantly anaemic, leucopenic ($p < 0.05$) and with a highly significant low platelets count vs. other ALL patients ($p < 0.001$). Serum IgG in the viral positive patients were slightly raised but not reach significance vs. the viral negative and the control group (760–1670 mg/dl, $p > 0.05$). The CD4+ and CD8+ cells were significantly decreased in Parvovirus B19+ cases vs. the rest of the leukeamic cases and the controls ($p < 0.05$).
Conclusion: Parvovirus B19 DNA was found in the CSF of four of 20 patients with ALL leukaemia at presentation (20%) but was absent in normal controls. Serum IgG was insignificantly raised in viral positive patients who assume that the virus has B cell transforming action and or the immune system starts to act. Suppression of CD4+, CD8+ T cells in Parvovirus B19 positive cases, in not yet compromised patients, elucidates the cytopathic effect of the virus and may points to its role in the pathogenesis of acute leukaemia. Further work is required in a large scale to clarify the interaction between the ParvovirusB19 and the immune system in the haematological malignancies.

1253 PUBLICATION

Characteristics and outcome of relapse in children with all treated with BMFprotocols

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Characteristics and outcome of relapse in children with Acute Lymphoblastic Leukemia (ALL) diagnosed from 11/1992 to 12/2002 treated according to BFM 90 and 95 and followed up to 2/2005, were evaluated. Fifty relapses among 194 (25.8%) children, 108 boys and 86 girls, were retrospectively studied. Of these, 31 occurred in boys (28.7%) and 19 in girls (22.1%) 3–82 months (med 24) from diagnosis. Of these relapses 7 occurred very early, 31 early and 12 late. Of 50 relapses 33 occurred in the bone marrow (BM), 6 in the central nervous system (CNS), 5 in the testes and 6 had combined relapses (BM+CNS 3, BM+testis 3). Relapsed children were treated as per the relapse protocols BFM 90 (22/50), BFM 95 (22/50) and other (6/50). 2nd complete remission (CR) was achieved in 35/50 (70%) and of them 15 underwent bone marrow transplantation (BMT), 10 MSD and 5 MUD, and 20 continued with conventional chemotherapy. Of these 35 children 16 (45.7%) continued in CR2 5–108 months from relapse (med 41 mo), 1 died of toxicity after BMT and 18 experienced 2nd relapse (BM 14, CNS 1, combined BM+CNS 3), 3–42 mo after the first relapse (med 8.5 mo). CR3 was achieved in 4/18 children and 1 is alive free of disease for 41 mo after 2nd relapse. In total 17/50 relapsed children are alive (CR2 16, CR3 1) 28–141 mo from diagnosis (med 78) and 5–108 from the last relapse (med 41).
From this group of patients it was shown that elevated white blood count on diagnosis ($p = 0.019$) and very early relapse ($p = 0.035$) have statistical significant prognostic value for the outcome after relapse.

1254 PUBLICATION

Treatment results for childhood T cell lymphoma – ten years experience in one institution

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Objective: To evaluate outcome for patient with T cell lymphoma treated using modified AIEOP ALL protocol.
Methods: The differences in comparison to AIEOP LLA 95 were follows: 1. HD MTX was reduced from 5 g/m^2 to 2 g/m^2, followed by leukovorin rescue reduced from 7.5 mg/m^2 of levatory form to 7.5 mg/m^2 of raceme form. 2. All patients were given prophylactic CNS irradiation. 3. To increase therapy intensity protocol II was applied twice.
Results: A total of 12 patients with Non Hodgkin lymphoma (NHLy) were evaluated, 9 boys and 3 girls, median age 10.2 years (range 61 to 185 months). NHLy patients presented with palpable supraclavicular lymph nodes and/or mediastinal tumour. There were 2 (16.6%) toxic related deaths. One patient with NHLy relapsed during maintenance therapy after 11 months. With a median follow up of 59.7 months event free survival is 75%.
Conclusion: Treatment specifically tailored to local condition opens a possibility to achieve high cure rate in low income countries but it there is a great need for improvement in supportive care treatment.

Patient Management

Oral presentations (Wed, 2 Nov, 13.45–15.45)

Improving Cancer Care: from geriatric oncology to special clinical issues

1255 ORAL

PACE: risk assessment for cancer surgery in elderly

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Background: The treatment of choice for solid tumour is surgery regardless of age. Geriatric population is rapidly expanding so is the cancer workload. Unfounded fear of higher operative mortality/morbidity for elderly cancer patients is compromising optimal treatment. An instrument able to forecast surgical outcome prior to intervention would facilitate a surgeon to discuss operative risk. A comprehensive geriatric assessment is tested in Preoperative Assessment for Cancer surgery in Elderly (PACE).
Material and methods: PACE started in July 2003. Patients $\geqslant 70$ undergoing moderate, major and major-elective cancer surgery, with minimum Mini Mental Score (MMS) of $\geqslant 18$ are prospectively interviewed two weeks prior to surgery. This interview incorporating MMS, Satariano's Modified Index of co-morbidities, Activities of Daily Living (ADL), Instrumental Activities of Daily Living (IADL), Geriatric Depression Scale (GDS), Brief Fatigue Inventory (BFI) and Performance Status (PS) to assess physical/psychological well being lasted for 20 minutes. Operative risk assessment tools used are: Physiological & Operative Severity Score for enUmeration of Mortality and Morbidity (POSSUM), Portsmouth modification (P-POSSUM), and American Society of Anaesthesiologists Physical Status (ASA). Correlation is done with pathological data and 30 days postoperative morbidity/mortality.
Results: 367 patients from 8 recruiting hospitals (UK, the Netherlands, Belgium, Italy, Japan) with a median age of 76 years (range 70–93) were affected by breast cancer (57%), gastro-intestinal (26%), uro-genital (12%), H&N (1.5%) and 1 ovarian. 31% (114/367) developed postoperative complications. Overall mortality is 2.4% (9/367). BFI ($P < 0.001$), GDS ($P < 0.016$), PS ($P < 0.0001$), and IADL ($P < 0.005$) were associated with 30-day morbidity. Co-morbidities, MMS ADL and ASA have failed to predict complications.
Conclusions: Aspects of PACE relating to depression (GDS), fatigue (BFI) self-care (PS) and activities of daily living (IADL) are the components