features as well as response to treatment and survival of adult Hodgkin's disease (HD) patients.

Methods: The study was performed on patients presented to NCI, Cairo, during the period from January 1975 to December, 1991.

Results: The total number of patients included was 914. Seventy percent (No. 642) were males, male to female ration 2.4:1 and the median age was 31 years. The most common histologic subtype was mixed cellularity (47.9%) followed by nodular sclerosis (21.7%), lymphocyte predominance (18%) and lymphocyte depletion (12.3%). Fifty seven percent stage III and IV and 5% presented with relapsing disease. Nodal presentation was encountered in 92%, and B symptoms was found in 41% of cases. Early stages were treated mainly by radiotherapy with complete response (CR) in 99% for stage I, 88% for stage II and 86% for stage III. patients with stage III and IV treated with combination chemotherapy achieved CR in 78.6% and 53.1% respectively. The 5-year relapse free survival (RFS) and overall survival (OS) were 35% and 43.7 while 10-year RFS and OS were 3% and 4.6% respectively.

Conclusion: These poor results may imply that we may have been less aggressive in our treatment or we are dealing with a population of patient with immune derangement due to poor nutrition or chronic parasitic infestation. Also endemicity of Bilharziasis in Egypt with liver affection may limit administration of optimal doses and schedules of chemotherapy.

1197 POSTER

Somatostatin receptor scintigraphy for the initial staging of non-Hodgkin's lymphomas

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Purpose: We present the results of a prospective blinded study comparing somatostatin receptor (SS-R) scintigraphy with conventional staging methods for initial staging of patients with NHL.

Methods: 150 Consecutive previously untreated NHL patients (50 low grade, 66 intermediate grade, 28 high grade and 6 unclassifiable) underwent scintigraphy after i.v. injection of [111-In-DTPA-D-Phe-1]-octreotide, 220 MBq. SS-R scintigraphy and conventional diagnostic tests were interpreted independently and the results compared.

Results: 89% (133/150) of the patients had a positive scan. In 31 patients (21%) the clinical stage was altered because of the result of SS-R scintigraphy and as a result the treatment plan was changed in 5 patients (3%). The lesion-based analysis showed an overall sensitivity of 65% (288/443). The sensitivity in the supra-diaphragmatic region was 72% (189/261) and 50% (70/139) in the infra-diaphragmatic region. A false positive uptake of radioactivity was observed in 16 lesions, mainly due to scars, hematomas and infections.

Conclusion: SS-R scintigraphy appears to disclose unknown lymphoma localizations in some patients with NHL, however the sensitivity especially for infra-diaphragmatic lesions is low.

1198 POSTER

Analysis of genomic instability by microsatellite analysis in childhood Burkitt's and large cell diffuse lymphoma

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Purpose: Genomic instability may, in addition to having bearing on the propensity for developing malignancy, be of relevance to sensitivity to genome directed therapy. In childhood lymphoma, highly variable karyotype abnormalities are commonly reported, while chemotherapy in view of disease localisation and stage at presentation is often the only viable option. For both aspects, information on prevalence of this abnormality in lymphoma is of interest.

Methods: Primary diagnostic, consecutive samples of 16 cases of diffuse large cell lymphoma (9 T-cell, 7 B-cell, mean age 9 y 9 m (range 1 y 5 m–16 y 8 m) and 13 Burkitt's Lymphoma, mean age 8 y 3 m (range 4 y 2 m–14 y) seen in a single treatment centre between 1976 and 1996 were included in the study. After routine extraction, amplifications were carried out at the loci D3S1304 and D3S1537 (both closely distal to the VHL tumour suppressor gene), ELN gene, D7S1870, IFNA, D1S243 (1p36) all of which show microsatellite variation. Analysis used isotopic labelling during amplification followed by non-denaturing gel electrophoresis and autoradiography.

Results: In two cases: Male age: 9 yrs 7 m, abdominal mass, B-cell large cell diffuse MNHL and Male, age 5 yrs, caecal mass, Burkitt's Lymphoma, unusual variants were observed. Other lesions were normal, although no normal tissue was available from separate analysis for direct comparison.

Conclusions: Only 2/28 childhood Burkitt's/large cell diffuse MNHL feature minor microsatellite variations warranting further study but suggesting a minor role for this pathway in contributing to genomic instability in lesions of this type.

1199 POSTER

Primary gastric lymphoma – The Royal Marsden Hospital experience

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Purpose: We aimed to determine the role of surgery in the treatment of primary gastric lymphoma (PGL) in patients receiving chemotherapy (CH) at this hospital since 1985.

Methods: Patients with intermediate- or high-grade PGL, defined according to the criteria of Lewin and Herrmann, and staged according to Musshoff, were identified using a prospectively accrued database.

Results: 41 patients (29 men, average age 65 (range 19–81), median follow up 4 1/4 years) fulfilled the inclusion criteria. At presentation, 35 patients complained of anorexia, 33 of abdominal discomfort, 31 of weight loss and 11 of recurrent vomiting. 15 patients had GI bleeding (5 haematemesis, 5 melaena and 5 microcytic anaemia), and 5 patients presented with perforation, 3 requiring emergency SX. 17 patients had early PGL (9 stage IE, 8 stage IIE1). 8 of 17 patients had initial SX, and 2 relapsed (1 before CH could be initiated). One of 9 patients receiving CH alone relapsed. All 3 relapsing patients achieved remission with further CH. Of the patients with more advanced stage PGL, 16 received CH alone, 5 SX followed by CH and 3 had radiotherapy (RT) as well as CH. The group receiving CH had more patients with advanced disease. In total 6 patients died with disease, all with advanced stage: 3 had received CH alone, 2 SX + CH and 1 CH followed by RT. All 6 deaths occurred within 18 months of diagnosis. 3 patients had malabsorption following gastrectomy, while GI-bleeding occurred in 5 patients following chemotherapy (none severe). No perforations occurred in the 25 CH patients.

Conclusions: CH alone appears to be as efficient as the combination of SX and CH in intermediate and high-grade PGL of any stage. Complications rarely occurred as a side-effect of CH, and were not life threatening.

1200 POSTER

Inhibition of spontaneous apoptotic cell death of B-chronic lymphocytic leukemia (B-CLL) cells by interleukin-12 in vitro

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A variety of cytokines including interleukin-2 (IL-2) have been reported to modulate cell survival in B-CLL. Since functional similarities between IL-2 and IL-12 have been described, we analyzed potential effects of IL-12 on the spontaneous vitro apoptosis of B-CLL cells. Ten peripheral blood samples enriched for B lymphocytes from seven patients with B-CLL (three men and four women aged 44 to 76 years) who had received no specific antineoplastic therapy including steroids for at least 6 months prior to sample collection were analyzed. One patient presented with stage 0 (according to the Rai staging system), four patients were stage II, and two patients stage IV. Mean time interval from first diagnosis to sample collection was 60 months. Peripheral blood mononuclear cells were isolated and depleted of contaminating cells via plastic adherence and sheep red blood cell rosetting. Cells were then short term cultured for 24 hours under serum free conditions in the presence of IL-12 (1 ng/ml). Incubation with IL-4 (10 ng/ml over 24 hours), which has been reported to effectively suppress spontaneous apoptosis in vitro was used as control for potential inhibitory cytokine effects. Apoptotic cell death was measured employing an enzyme-linked immunoassay measuring cytoplasmatic histone-associated fragmented DNA mono- and oligonucleosomes via anti-histone antibodies (Boehringer Mannheim, Germany). Results of the photometric absorbance (A) measurements are given as ratio of $A_{\text{cytokine mediated apoptosis}}/A_{\text{spontaneous apoptosis}}$ (A_{cy}/A_{sp}). We found that IL-4 used as control could induce inhibition of apoptotic cell death (as