

the involved mucosal surface (small whitish polyps or whitish granules). A complete response was obtained in all patients that received R-CHOP, and no recurrence was seen.

Conclusions: Examination of the entire small bowel of PFLGI patients is necessary and DBE is useful for evaluation of patients with PFLGI. R-CHOP may produce a complete response, but it is necessary to monitor patients for as long as possible because of the risk of relapse.

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POSTER

Are there variations in the cause of deaths over different time periods in Hodgkin's disease?

B. Cantos¹, A. Hurtado¹, C. Maximiano¹, S. Mellor², A. Manquillo², P. Espinosa¹, M. Mendez¹, R. Cubedo¹, P. Provencio¹. ¹Clinica Puerta de Hierro, Medical Oncology, Madrid, Spain; ²Clinica Puerta de Hierro, Internal Medicine, Madrid, Spain

Introduction: Hodgkin's disease is curable in a high percentage of patients, although exists an increase mortality in patients who suffered this disease with regard to general population. This variation could be caused by previous treatment.

Our study try to demonstrate if the new technology and the change in the treatments over the time had changed the mortality patterns.e studied the various causes of death.

Patients and Methods: We included all patients diagnosed with HD, histologically confirmed, at the University Hospital "Clínica Puerta de Hierro" between 1967 and 2003. The patients were divided into three cohorts: Cohort A patients treated before 1980, Cohort B patients treated between 1981–1986 and Cohort C, patients treated after 1986. Vital situation and competing risks of causes of deaths were examined in three time periods.

Results: We included 534 patients, the survival estimates at 5, 15 and 20 years were 81%, 72% and 65% respectively. The median follow-up was 9.1 years and at the close of the study 63.1% were alive and 31.8% had died. In the whole cohort the most common cause of death was the progress of Hodgkin's disease, followed by death due to a second tumor. At the analysis by periods, there were statistically significant differences between cohort A and the other two. Combined treatments, advanced stages and LD and MC histology were less frequent after 1980. Survival was worse in cohort A with statistically significant difference ($P < 0.001$). However the main cause of death was tumor progression independently of the time period analyzed.

Conclusions: The main cause of death was Hodgkin's disease progression. A clear reduction in death related to the toxicity of treatments was seen over time. Patients die now for reasons that are different from in the 1970s and this is important when planning preventive and clinical research activity. So, the question is posed as to whether the survival and causes of death series for these patients are telling us about a real situation.

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POSTER

Late-onset neutropenia is infrequent and self-limiting in patients with diffuse large B-cell lymphoma in complete remission following therapy with rituximab in combination with chemotherapy

R. Quek¹, G. Lai¹, M. Tao¹, A. Chan², F. Gao³, S.P. Yap⁴, S. Loong⁴, L. Tan⁵, I. Sng⁵, S.T. Lim¹. ¹National Cancer Centre Singapore, Department of Medical Oncology, Singapore, Singapore; ²National University of Singapore, Department of Pharmacy, Singapore, Singapore; ³National Cancer Centre Singapore, Clinical Trials and Epidemiological Sciences, Singapore, Singapore; ⁴National Cancer Centre Singapore, Department of Radiation Oncology, Singapore, Singapore; ⁵Singapore General Hospital, Department of Pathology, Singapore, Singapore

Background: Recently, studies suggested that late-onset neutropenia (LON) is common in patients receiving rituximab-containing chemotherapy and is associated with high rates of infection. However, these studies were heterogeneous and included patients with different histologies, chemotherapy regimens and treatment intent, making it difficult to draw any firm conclusions. We aim to (1) study the incidence of LON in a uniform group of patients with diffuse large B cell lymphoma (DLBCL), in complete remission (CR) following curative 1st line therapy (2) to evaluate its clinical relevance with respect to life threatening sepsis and (3) ascertain any predictive factors for its occurrence.

Materials and Methods: We reviewed all patients with DLBCL treated in National Cancer Centre Singapore from March 2003 to August 2006, in CR following CHOP-like chemotherapy with or without Rituximab, and identified cases with LON as defined by the neutrophil count of $<1.5 \times 10^9/L$, without an apparent cause, after the recovery of neutrophil count following completion of the intended chemotherapy.

Results: Amongst these 115 patients identified, 85 (74%) received Rituximab in-combination with CHOP-like chemotherapy. The median number of cycles of Rituximab was 6. At a median follow-up of 24.6 months (range, 5.0 to 46.6 mths), 15 (18%) in the Rituximab group developed LON as compared to none in those not receiving Rituximab. The median time to neutrophil nadir (grade 3 and 4 in 8 and 3 patients, respectively) was 3.3 months (range, 1.3 to 8.6 months). Development of LON was associated with one episode of non-life threatening bacterial culture-positive urinary tract infection and pulmonary tuberculosis in the same patient; no other serious infectious episodes were documented. Filgrastim was administered in one patient. Neutrophil recovery occurred in all but 2 patients, at a median of 5.8 months (range, 1.4 to 11.4+). Univariate analysis including age, stage, lactate dehydrogenase, initial bone marrow involvement and number of Rituximab cycles, were not predictive for LON. **Conclusions:** Our study shows that grade 3–4 LON is an infrequent occurrence (13%) in DLBCL patients receiving chemo-immunotherapy. Our data suggests that it is self-limiting and not associated with life-threatening infections. These results are important and reassuring, as DLBCL is the most common lymphoid neoplasm in clinical practice and Rituximab is invariably used.

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POSTER

High-dose sequential chemotherapy followed by autologous stem cell transplantation in relapsed and refractory lymphomas. Sixteen years experience of a single center

G. Koumakis¹, N. Tsoukalas¹, D. Tryfonopoulos¹, S. Demiri¹, M. Vassilomanolakis¹, V. Barbounis¹, S. Droufakou¹, I. Filis¹, M. Moraki², A. Efremidis¹. ¹Agios Savvas Anticancer Hospital, 2nd Dpt Medical Oncology, Athens, Greece; ²Agios Savvas Anticancer Hospital, Blood transfusion Dpt, Athens, Greece

Background: Traditionally high-dose (HD) chemotherapy of refractory lymphomas (Hodgkin and non-Hodgkin) consists of a single cycle of chemotherapy. In 1990 Gianni, et al. proposed sequential infusion with high doses of effective regimens as a conditioning and simultaneously therapeutic part of a megatherapy program which showed high response rates in refractory Hodgkin lymphomas. The aim of this study was to investigate the applicability of the sequential high dose therapy program in patients with refractory lymphomas as well as to estimate the therapeutic profit compared to single cycle megatherapy and transplantation.

Materials and Methods: Fifty patients (median age 38 years, range 16–60) (23 females, 27 males) who suffered from Hodgkin (20) and non-Hodgkin lymphomas (30) were enrolled. All patients had received conventional chemotherapy +/- radiotherapy and presented primary refractory disease or relapse within the first 12 months since the first treatment. Peripheral blood stem cells (PBSC's) were mobilized with HD-CTX 6g/m² and growth factor successfully in all patients. Upon hematologic recovery they received sequentially HD-VP16 1400 mg/m², HD-MTX 8g/m², HD-VCR 1.4 mg/m² and HD-Cisplatin 120 mg/m². Finally they received high dose chemotherapy with BEAM (BCNU 300 mg/m² D1, Etoposide 200 mg/m² D2–5, Aracytine 200 mg/m² D2–5 and Melphalan 140 mg/m² D6). After 72 hours from the end of chemotherapy PBSC's were reinfused.

Results: Overall response rate was 86% [28 (56%) complete remission (CR) and 15 (30%) partial remission (PR)] while seven patients (14%) presented deterioration (PD). Specifically, from patients with Hodgkin disease 11 (55%) presented CR, 5 (25%) PR and 4 (20%) PD, while from patients with non-Hodgkin lymphoma 17 (56.67%) presented CR, 10 (33.33%) PR and 3 (10%) PD. Toxicity was manageable. The mean overall survival (OS) was 105.95 months (SE = 13.61) and the mean time to progression (TTP) was 97.7 months (SE = 13.7).

Conclusion: Sequential high dose chemotherapy followed by autologous stem cell transplantation is effective in patients with lymphomas refractory to conventional therapies and probably is better than classical programs with single cycle megatherapy and transplantation.

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POSTER

Different decrease pattern of FDG uptake after 1 cycle chemotherapy in NK T-cell lymphoma: comparison with diffuse large B cell lymphoma

S. Kim¹, B.S. Kim², S.J. Kim², J.S. Yeo³. ¹Korea University Anam Hospital, Nuclear Medicine, Seoul, South Korea; ²Korea University Anam Hospital, Internal Medicine, Seoul, South Korea; ³Dongguk University International Hospital, Nuclear Medicine, Gyeonggi-do, South Korea

Background: Early metabolic evaluation after 1 cycle of chemotherapy (chemo1) is accepted as an effective tool to predict outcome in patients with diffuse large B cell lymphoma(DLBL). But little is known about early