Discussion: The complete color transformation of the entire skin due to hemosiderin accumulation is to the best of our knowledge the first reported observation in CD30+ lymphoproliferation/ALCL patient. We speculate that hemosiderin loaded macrophages resulted from the paraneoplastic process by some still unknown mechanism.

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Primary mediastinal B cell lymphoma

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A 51 year old male presented with a one month history of progressive facial and chest swelling, hoarseness and dry cough. He developed acute onset anterior chest pain and presyncope. He had no weight loss or sweats and no haemoptysis. He was a non-smoker with no significant past medical history. On examination he had facial swelling and distended neck and chest wall veins. Breath sounds were reduced at the right apex. There was no peripheral lymphadenopathy or hepatosplenomegaly. Clinically the impression was of superior vena caval obstruction syndrome. Full blood count, biochemistry and LDH were normal. CT scan showed a 10.6 by 6.4 cm anterior mediastinal mass (image available). There was no other lymphadenopathy. Biopsy revealed a diffuse, moderately large lymphoid cell infiltrate with diffuse sclerosis (image available). Immunohistochemistry was positive for CD20, CD79a, BCL2, BCL6 and MUM1. CD5, CD30, cyclin D1, CD21 and CD23 were negative. Proliferation fraction was 70%. A diagnosis of primary mediastinal B cell lymphoma was made, stage 1AX. He was commenced on dexamethasone prior to starting definitive chemotherapy in the form of R-CHOP. CT scan after 3 courses showed >50% reduction in the mass which now measured 6.6 by 2.5 cm. Following a further 3 courses of R-CHOP the mass reduced to 5.2 by 1.5 cm. A PET/CT scan on completion of chemotherapy showed a complete metabolic response (image available). In view of this result, radiotherapy was omitted. The patient remains well in clinical remission 9 months post presentation. Potential points for discussion: 1. Is primary mediastinal B cell lymphoma a distinct histological entity? 2. Optimal first line chemotherapy for primary mediastinal B cell lymphoma 3. The role of rituximab 4. The utility of PET/CT imaging 5. The role of consolidation radiotherapy

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Relapsing multiple myeloma with difficult peripheral blood stem cells mobilization and uncommon adverse effects of novel agents

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A 53-year-old man presented in November 2008 with left sided chest wall swelling and was diagnosed as multiple myeloma, Durie-Salmon Stage III and serum beta2-microglobulin 3.2 mg/L). Investigations confirmed left fourth rib plasmacytoma with 20% abnormal plasma cells in bone marrow and monoclonal protein in serum of IgA lambda subtype. Following 5 cycles of VAD regime from November 2008 till March 2009, he attained complete remission and planned for autologous PBSCT and thalidomide. However, he failed twice peripheral blood stem cells (PBSC) mobilizations using high dose cyclophosphamide and refused bone marrow harvesting. In October 2009, he had successful PBSC mobilization with filgastrim and plerixafor yielded 3.7×106 CD34+ cells/kg in 3 leukapheresis sessions. Two days after the mobilization, he developed worsening renal function, detection of urine Bence Jones, abnormal plasma cells in peripheral blood and raised serum free light chain. There were also severe thrombocytopaenia, multiple lytic lesions, myelomatous deposits in the pelvic muscles and pleura and cardiogenic shock with diastolic dysfunction secondary to suspected early amyloid cardiomyopathy. He was treated with bortezomib, dexamethasone and thalidomide dose was continued but was later withheld due to intolerable adverse effects. It was complicated by severe peripheral neuropathy NCI-CTAE Grade III and deterioration in cognitive function with MMSE of 13. This occurred about 2 weeks after second cycle of VD which was thought to be associated with bortezomib. Other possible causes of deterioration in cognitive functions were excluded. A week later, he developed severe pneumonia and massive haemorrhagic pleural effusion after which he succumbed. In this case, we would like to highlight the uncommon adverse effects of novel agents, namely subcutaneous plerixafor in mobilizing patients with multiple myeloma and bortezomib. Further management of these issues are to be discussed.

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Six cases of ABO discrepancies after intensive chemotherapy for B cell lymphoma

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In ABO blood typing, the discrepancies between forward (cell) grouping and reverse (serum) grouping are observed in the cases of disease-related immunosuppresion. However, it is obscure that these phenomena are related to some types of treatment, such as intensive chemotherapy for malignant diseases. We retrospectively analyzed 2156 specimens for ABO blood typing in our hospital between January 2005 and December 2005, and compared forward and reverse typing tests in each case. ABO typing was performed by gel column centrifugation method at room temperature. Anti-A or anti-B antibodies were negative (zero), trace (w+) and weakly positive (1+) in 30 specimens of 24 cases (19 cases of group A, 4 cases of group B and one case of group O). In these cases, 12 cases were examined for the first time and the other 12 cases (11 in group A and one in group O) had been examined before. In latter 12 cases, decrease of anti-B antibodies was observed in eight cases (seven in group A and one in group O), including six cases of B-cell lymphoma (B-NHL) in group A. All these cases of B-NHL received intensive chemotherapy with rituximab. Decrease of serum immunoglobulin (IgG, IgA and IgM) was observed in all the cases after B-NHL treatment. The ABO discrepancies in these cases may be related to decrease of anti-B antibodies caused by treatment-related severe immunosuppression (decrease of serum immunoglobulin). Anti-B agglutination reaction might be influenced more easily than anti-A, as the amount of group B antigen on red blood cells is less than that of group A antigen. Further studies are needed to clarify between this phenomenon and other complications (such as severe viral infections).

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Anaplastic large T/null cell lymphoma (ALCL) while treating Langerhans cell histiocytosis (LCH)

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We report a case of a 27 year-old woman, previously healthy, with the diagnosis of a LCH and an ALCL. In Jun/2007 the patient (pt) noted a left parasternal lump, with progressive

growth. Besides hyposthesia of the left arm and shoulder, she had no other symptoms. The laboratory studies were normal and the biopsy of the mass revealed an eosinophilic granuloma, CD1a and S100 +. The CT scan of the thorax showed a mass in the anterior mediastinum and the bone scan revealed involvement of the sternum. It was considered as a Single System LCH and the pt began therapy with prednisone. After 6 weeks, the CT showed progression. It was decided to submit the pt to Chemotherapy (ChT) according the protocol of the Histiocyte Society (HS) LCH2 study. She completed 6 cycles with partial response and resolution of the symptoms. At this time, she had leukocytosis and eosinophilia. The bone marrow biopsy was normal and it was decided to complement treatment with local Radiotherapy. At the end of RT the blood cont was normal and since she had no HLA-matched donor she was kept with no other treatment. Two months later, she initiated a lumbar pain and B symptoms. The CT showed multiple lumbar adenopathies, where biopsies were performed. The biopsies were inconclusive. Progression of LCH was assumed and salvage ChT according the protocol of the HS was initiated. After 2 cycles the pain persisted with increased intensity. A PET scan revealed multiple bone, nodal and splenic lesions and ALTC was diagnosed on a bone marrow biopsy. She began ChT with ICE plus alemtuzumab. Once again the symptoms resolved, but persistent pancitopenia lead to suspension of treatment after 4 cycles, despite dose reduction. The pt died 5 months later with progressive disease. This case is other example of the association of LCH and another lymphoid neoplasia and illustrates how important it is to repeat biopsies whenever disease progression is suspected.

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Education and psychosocial adaptation of multiple myeloma patients

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Introduction: The essence of multiple myeloma (mm) patient's education is in providing specific knowledge about disease and treatment, and in giving psychosocial support. Informed and educated patients are able to save selfesteem, to establish good relationship with social environment and to achieve better social participation. The aim of this study was to investigate the impact of the education on mm patient's self-image and the impact of the education on mm patient-social environment relationship.
Patients and methods: 64 (38 women and 26 men, age 32–75 yrs) mm patients entered the study experimental group (E, n = 32) and control group (K, n = 32), all matched regarding age and educational level. The patients of E group differed in regard to their previous education; this group underwent the Greek Educational Programme "Learning to live with multiple myeloma" over 3 months. Both groups answered questionnaire specifically designed to assess self-image of mm patients and relationship with social environment.
Results: The education significantly improved self-image in E group when compared to K group (P 0.02).
Conclusions: The education has important contribution in establishing selfmanagement approach in which patients assume responsibility for their behavior, for changing their environment, and for planning their future. For successful multiple myeloma patients' psychosocial adaptation and social participation, it is necessary that the whole society provides more resources for psychosocial support.

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Assessment of receptor activator of nuclear factor kappa B ligand (RANKL) and osteoprotegerin (OPG) in lymphoma patients

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Background: Receptor activator of nuclear factor B ligand (RANKL), also Known as, is a type two transmembrane protein that belongs to the TNF superfamily. Recent studies showed expression of RANKL in Hodgkin's Lymphoma and follicular non Hodgkin's Lymphoma and an antiapoptotic role for this factor has been postulated. The aim of this study was to assess the RANKL and Osteoprotegerin (OPG) in patients with lymphoma, and its role in relation to prognostic factors.
Subjects and methods: The study was carried out on the following group of patients: 15 patients with Hodgkin disease, 30 patients with Non-Hodgkin lymphoma, 15 healthy subjects matching age and sex as patients group. RANKL and OPG in serum by ELISA was measured in all patients and control groups.
Results: RANKL was higher among Hodgkin group compared to control group with highly significant difference inbetween both groups as regard RANKL ($p < 0.01$), Hepatosplenic infiltration was more common among patients with Hodgkin disease and high RANKL. Positive correlation between RANKL and adverse prognostic parameters (LDH, advanced stage, number of extranodal site, ESR). Positive correlation was found between ESR, ALP, GGT, stage of Hodgkin and RANKL. As regard patients with Non-Hodgkin lymphoma we found that: RANKL was higher among non-Hodgkin group compared to control group ($p < 0.05$). No significant correlation between RANKL and grade (low, intermediate and high). OPG results were insignificantly different among the studied groups.

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High dose methotrexate followed by temozolomide plus concomitant radiation therapy in patients with newly diagnosed primary central nervous system Lymphoma: Preliminary results of a phase I dose escalation study

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Background: A phase I trial was designed to determine the maximum tolerated dose (MTD) of concurrent Temozolomide (TMZ) to radiotherapy (RT) after high dose of Metotrexate (MTX-HD) in newly diagnosed of Primary Central Nervous System Lymphoma (PCNSL). Materials: Patient eligibility criteria were age >18 yrs, pathologically proven PCNSL and informed consent form. After MTX-HD schedule, patients received radiotherapy concomitantly to escalating dosages of TMZ (50–60–75 mg/mq/die for 5 days/week). Radiotherapy treatment was conformed on two different clinical target volume (CTV) delivered in sequence: CTV2 comprised whole brain plus leptomeninges until C2; (30 Gy–2 Gy/die) while CTV1 was the initial site of disease plus residual mass if present. The dose to CTV1 was prescribed according to response obtained by MTX-HD (6 Gy if complete, 10 Gy if partial, 16 Gy if progression disease). Dose-limiting toxicity (DLT) was any grade >4 acute hematological toxicity (RTOG score) or any grade >3 acute hepatic toxicity. The MTD would be exceeded if 2 of 6 patients in a cohort experienced DLT.