infectious episodes. In March-02, he was admitted to Hospital with fever, loss of weight (12 kg), diarrhea with >10 depositions/day, of liquid orange stools devoid of blood, tenesmus and abdominal tenderness with peritoneal signs. X-ray of abdomen showed diffuse dilation of gut. Abdominal ultrasound scan and TAC revealed scarce free liquid and thickening of colonic wall. Colonoscopy: replacement of normal mucosa by multiple nodules, resembling sessile polips; a biopsy of one of them was informed of 'minimal inflammatory changes'. Conventional microbiologic studies rendered no result (cultures, C. difficile toxin, serologies, search for virus and parasites). Specific search for C. parvum (modified Ziehl's stain) was positive in 3 samples. The CD4+ lymphocyte count was 400/μL. Therapy: paromomycin, 1 g p.o. b.i.d. and diet supplementation with *Lacto-bacillus sp*. Resolution of diarrhea, a significant weight gain and improvement in performance status was attained in the following weeks. *Case 2*: 18 yr.-old male. Diagnosed of Hodgkin's disease, NS-subtype, stage IV-B, refractory to several lines of chemotherapy, including BEACOPP, ESHAP/MINE and a gemcitabine 'based scheme. In April-05, he was admitted to Hospital because of protracted fever, diarrhea with green liquid stools, loss of 4 kg in a single week, diffuse abdominal pain, vomiting and tenesmus. Conventional microbiologic studies were also inconclusive. Considering the former case, we asked again for a C. parvum search in stools, which was clearly positive. Therapy with azythromycin (5 days) and paromomycin (14 days) was undertaken, after which diarrhea and fever, as well as the other symptoms disappeared in this period; complete clearance of parasite cysts in stools could be demonstrated. A significant recovery of nutritional status was also accomplished. 1.- Conventional methods for detecting parasites in stools may not detect C. parvum. This protozoan must be suspected when no diagnosis can be drawn after a complete set of explorations, and an intentional search with specific stains. Although nitazoxanide has been approved for Cryptosporidiasis, this drug is not available in Spain yet. We believe that this simple combination, i.e.. azythromycin, paromomycin and diet supplementation is a suitable option for an, otherwise emaciating, unusual form of infectious diarrhea in hematological patients.

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ATYPICAL EOSINOPHIL DISTRIBUTION OBSERVED IN PATIENTS WITH MALARIAL INFECTION WHEN USING SYSMEX XE-2100

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Backgrounds. The incidence of malaria has been increasing in civilian population and the prevalent area being more wider in Korea. Malaria must be recognized promptly in order to treat the patient in time and to prevent further spread of infection in the community. *Aim*. Malaria can be suspected based on the patient's symptoms and the physical findings at examination. However, for a definitive diagnosis to be made, laboratory tests must demonstrate the malaria parasites or their components, which are time consuming and need expertise. As it is likely that general screening tests like a complete blood cell count are always undertaken for patients who present with pyrexia, it can be expected that attention to any abnormalities found in automated hematology analyzer can decrease a delay in the diagnosis of malaria if such a diagnosis was not initially considered.

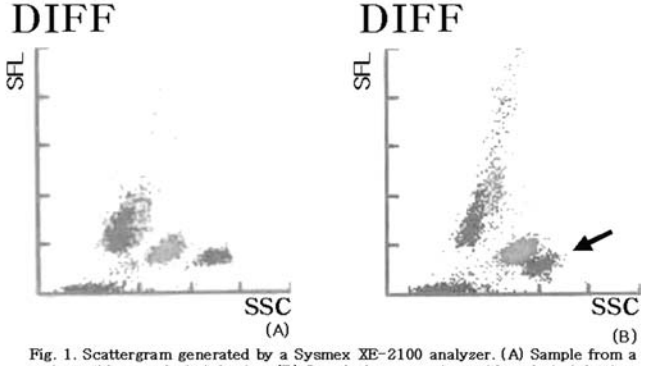

Fig. 1. Scattergram generated by a Sysmex XE-2100 analyzer. (A) Sample from a patient without malaria infection. (B) Sample from a patient with malaria infection, showing atypical distribution of eosinophils (arrow). (clusters: skyblue; neutrophils, red; eosinophils, green; monocytes, pink; lymphocytes)

Methods. Hematological analysis using Sysmex XE-2100 (TOA medical Electronics, Kobe, Japan) and Advia 120 (Bayer Diagnostics, Tarrytown, NY, USA) was performed on samples positive for malarial parasite. *Results.* We found 3 peculiar patients with P. vivax malaria who had pseudoeosinophilia determined only when using Sysmex XE-2100. Although eosinophilia of 5.4%-24.3% was found in 3 patients when measured by Sysmex XE-2100, eosinophilia was not found either when measured by Advia 120 or read by microscopy. As a result of reviewing the scattergram generated by Sysmex XE-2100, atypical eosinophil distribution was placed more closely to the neutrophil distribution than typical eosinophil distribution in the WBCs scattergram (Fig. 1). This atypical eosinophil distribution was due to the presence of hemozoin-containing neutrophils. It was concluded Sysmex XE-2100 analyzer showed erroneously high eosinophil counts. *Summary/Conclusions.* It is feasible that reading the WBCs scattergram to find a certain hematologic abnormality such as atypical eosinophil distribution as a result of hemozoin-containing neutrophils may contribute to the diagnosis of malaria especially for patients unsuspected.

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USEFULNESS OF THE VORICONAZOLE PLASMA LEVELS MONITORING IN HEMATOONCOLOGICAL PTS TREATED BY ORAL FORM OF THE VORICONAZOLE

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Backgrounds. Voriconazole, a new azole antifungal agent, is widely used in hematooncological pts. Even the bioavailability of the voriconazole oral form reaches 90%, several situations can lead to the impairement of the drug absorption. Even a lot of discussions about usefulness of the voriconazole plasma levels monitoring, we decided to monitor levels of this drug in our pts to confirm adequate absorption in these severely ill pts. *Methods.* In all pts treated with oral voriconazole from 8/2005 to 2/2006 steady-state trough plasma voriconazole levels were measured using an HPLC assay. *Results.* 49 samples from 22 pts were tested. Pts had drug levels checked once (n=8), twice (n=7) or =/> 3 times (n=7) 4-86 days (median 11) after starting voriconazole or dose modification. Mean and median plasma levels were 1,1 and 0,75 microgram/ml (range: < 0,2 - 5,41 μg/mL). 19 samples (39%) from 10 pts (45%) were < 0,5 microgram/ml (possibly below the *in vitro* MIC90 for Aspergillus sp.) and 12 samples (24%) from 7 pts (32%) were < 0,25 μg/mL (possibly below the mean in vitro MIC90 for Candida sp. in our dept.). Potentially impaired absorption of the voriconazole (due to worsened intestinal peristalsis or aplication through NG tube) or using of reduce dose of voriconazole as a reason for lower drug steady-state plasma levels were indentified in 7 of 12 samples (58%) with voriconazole plasma level < 0,25 and in other 2 of 7 samples (29%) with voriconazole plasma level between 0,25 - 0,5. Interestingly, in 5 of 12 samples (42%) with voriconazole plasma level < 0,25 and in other 5 of 7 samples (71%) with voriconazole plasma level between 0,25 - 0,5 the reason for the insufficient drug level in plasma were not identified. Hepatic CYP2C19 genetic polymorphism with differences in drug metabolisation can be the possible explanation. The dose of oral voriconazole was increased in 3 pts, that leads to drug steady-state plasma level increase with mean 2,47 microgram/ml. *Conclusions.* Voriconazole plasma levels after the use of oral form of the drug in hematooncological pts vary significantly and plasma levels monitoring can help to clinicians to confirm achievement of the therapeutic levels of voriconazole especially in pts with gastrointestinal impairment. This approach needs farther evaluation.

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JC PAPOVAVIRUS LEUCOENCEPHALOPATHY AFTER TREATMENT WITH CHEMOTHERAPY AND RITUXIMAB

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Background. Progressive multifocal leucoencephalopathy (PML) is a rare demyelinating infection of the central nervous system caused by the JC papovavirus usually seen among immunocompromised patients. The most common underlying immunosuppressive illness is AIDS. However, PML may be seen among patients with lymphoproliferative disorders and immunosuppression induced by chemotherapy. Recently, an association between PML and rituximab with autologous or allogeneic transplantation has been discussed. *Aims*. We report the case of a woman with a mantle cell lymphoma who developed PML after a combination of chemotherapy with rituximab. *Methods*. A 67 year old woman was