usefulness in guiding initial antifungal therapy was approximately 70%.

Conclusion: Alternate day determination of BG concentrations in pts with PN is a useful adjunct in identifying those who develop IM, when used as part of an overall clinical and radiological evaluation strategy. Pts with transient elevation of BG usually had enterocolitis and thus may have low-burden fungemia of gut origin.

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The Prevalence and Management of Anaemia Amongst Patients With Cancer in Cameroon
David Nkengafac, Fidelis Gira, Matina Susue, Caroline Tinato, Relindis Ajem. Institute for Biomedical Research, South West Province, Buea, Cameroon

Background: Anaemia is one of the most dreaded complications among patients with malignant pathologies. Its causes can be varied and whatever its severity, the impact on the quality of life of the patient remains essential. Despite this complication in cancer patients, limited studies have been conducted in this field and so research data in the literature concerning anaemia are very limited. This study was therefore conducted to determine the prevalence and the management of anaemia amongst patients with malignant diseases.

Methods: A national survey was conducted between February 2006 and March 2007. This observational multicentric study was conducted with 150 experts practicing in all the major health institutions or units treating patients with solid tumours and/or malignant haematological diseases in Cameroon. Control over one day standard of consultation for each questioned expert, 534 patients were enrolled, including 335 (62.7%) patient with solid tumour and 199 (37.3%) patient with malignant haematological disease.

Results: The median age was 48 years (range: 11-82 years) including 162 men (30%) and 372 women (70%). At enrollment, the median level of haemoglobin (Hb) was 10.3 g/dl (range: 4.7-17.3 g/dl) and 38% of patient had a level of Hb < 11 g/dl. Anaemia was found in all the cancer localizations and whatever the stage or the therapeutic status of the disease. About 3/4 of the anaemic patients received treatment by erythropoiesis stimulating agent (ESA) and approximately 24% of them did not receive any specific treatment for the anaemia. The median level of Hb at the introduction of the ESA was 9.2 g/dl.

Conclusion: Our results show an improvement in the management of anaemia and the use of the ESA in patients with various cancers.

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Fungal Strains Isolated from Blood of Haematological Patients Hospitalized in Clinical Hospital of Medical University of Warsaw in 2007 – Etiological Agents and their Susceptibility
Ewa Swoboda-Kopec, Irena Nestsyvetayeva, Beata Sulik-Tyszka, Ewa Stelmach, Magdalena Sikora, Sylwia Blachnio, Dariusz Kawecki, Miroslaw Luczak. Dept. of Medical Microbiology Medical University of Warsaw, Poland

Objective: Identification and susceptibility tests on strains isolated from blood samples of patients hospitalized in Department of Haematology in 2007.

Materials and Methods: From January to the end of December 2007 in Mycology Laboratory the 427 positive mycological cultures from clinical samples of patients hospitalized in Department of Haematology were identified. Fifteen (3,5%) of all specimens were the blood positive samples. The clinical material was examined according to the standard mycological procedures. The isolated strains were incubated on Sabouraud medium plates with addition of gentamicin and chloramphenicol (Becton Dickinson). The identification of the isolates was performed on CHROMagar Candida medium and automatic test of ID32 C (bioMerieux). The susceptibility tests for antifungal agents: Amphotericin B, Itraconazole, Fluconazole, Voriconazole, Caspofungin and Posaconazole, was done using E-tests (AB Biodisk).

Results: From the whole number of 427 samples from Department of Haematology, the positive blood samples were 3.5% - 15. The
most common isolates were yeast-like fungi - 14 strains (99%). The dominant strains from Candida genus were C. glabrata 4 (28.5%), C. krusei 4 (28.5%), C. albicans 2 (14.3%), C. tropicalis 1 (7.2%), C. parapsilosis 1 (7.2%). Other fungal strains: Cryptococcus neoformans isolated in 2 cases (14.3%) and Aspergillus fumigatus 1 strain - 6.7% out of the total number of cultures. The susceptibility of isolates for Amphotericin B and Voriconazole was 100%. In 13 strains which were tested for Itraconazole, 6 (46%) were resistant, the 16.7% of analyzed species were Fluconazole resistant. 100% of C. glabrata isolates were susceptible for Caspofungin and Posaconazole. 

Conclusions: The performed analyses indicated that yeast-like fungi had the highest contribution in fungemias (99%). The main etiological factors of fungemia in immunodeficient patients were non-albicans species 66.7%. 3. The dominant species from Candida genus with increased resistance for antifungal agents were C. glabrata 33.3% and C. krusei 33.3%. The most efficient antifungal agents were in vitro Amphotericin B and Voriconazole.

### 64 A Case of Pulmonary Angioinvasive Zygomycosis in a Patient with Acute Promyelocytic Leukemia successfully treated with Surgical Resection and Posaconazole

**Julio Mendez, Mayo Clinic Jacksonville, Division of Infectious Diseases, Jacksonville, Florida, USA**

31-year-old African American male patient previously healthy and a retired professional football player presented to his primary care physician on early August of 2007 complaining of cough, and initially treated for a suspected upper respiratory infection with cefpodoxime and doxycycline without any improvement. On August 20, 2007, he developed hemoptysis and was found to have anemia (8.2 g/dL), thrombocytopenia (23,000/mm³) and leukocytosis (14,500/mm³) with 50% blasts. A bone marrow biopsy on August 21, 2007 was consistent with Acute Promyelocytic Leukemia (APL) and started induction chemotherapy on August 24, 2007 with ATRA, Idarubicin, and Dexamethasone until August 30, 2007 when Idarubicin and Dexamethasone were discontinued and was kept on ATRA. He became neutropenic on August 27, 2007 and on September 9, 2007 developed fever associated with a right middle lobe consolidation and a right pleural effusion and thoracentesis cultures were negative. He remained neutropenic until September 17, 2007 and during this time received broad spectrum antibiotics and antifungals including Caspofungin from August 24, 2007 to September 6, 2007, Voriconazole from September 6, to September 10, 2007 and Ambisome from September 10, 2007 until October 9, 2007. On September 21, 2007 and due to the progression of the infiltrate, he had a bronchoscopy and a tranbronchial biopsy was consistent with Angioinvasive Zygomycosis and was kept on intravenous Ambisome and Posaconazole was added. On October 1, 2007, he underwent a right exploratory thoracotomy with decortication of the right lower lobe and partial parietal pleurectomy and right middle lobectomy and the pathologic report showed Angioinvasive Zygomycosis, however, the fungal cultures were negative. He remained on intravenous Ambisome and Posaconazole and fourteen days later was dismissed home on Posaconazole with the intention to continue this agent while on therapy for the APL and to extend the treatment for one additional year post-remission. PCRs for APL in peripheral blood have been negative since October 15, 2007.

**Conclusion:** He is currently on therapy for the APL with ATRA, Methotrexate, and 6-Mercaptopurine and the plan is to extend this regimen for two years. He was re-evaluated on February 5, 2008 and was asymptomatic and follow-up chest x-rays have continued to show signs of resolution and is now only consistent with post-operative changes. He has continued to tolerate Posaconazole well.

### 65 Invasive Zygomycoses in a Tertiary Haematonoocological Centre in the Czech Republic

**Michal Kouba1, Vit Camp2, David Pohrelich1, Petr Cetkovsky1.**

1Institute of Haematology and Blood Transfusion, Clinical Department, Prague, Czech Republic; 2Institute of Pathology and Molecular Medicine of the 2nd Medical Faculty of the Charles University, University Hospital Motol, Prague, Czech Republic.

**Background:** Infections by Zygomycetes (class Zygomycetes, most infections by fungi of the Mucorales order) are rare emerging mould infections found almost exclusively among immunocompromised patients (malignant diseases, after haematopoietic stem cell transplantation (HSCT) or solid organ transplantation, neutropenia, iron overload, diabetes mellitus, drug addiction …). In the last decades the number of referred cases in English written literature increased. The outcome of treatment is slowly improving due to aggressive surgical treatment together with modern antymycotic treatment. In spite of that the mortality of pulmonary form remains over 80%.

**Materials:** We summarized the invasive infections by Zygomycetes in a 33 bed (21 standard beds, 8 intensive care beds, 4 transplant beds) tertiary haematonoocological centre in Prague, Czech Republic.

**Methods:** A prospective monitoring of mould infections in the time period 1/2003-12/2007 was used and we choose only the proven cases (according to EORTC-MSG criteria).

**Results:** There were two clusters of infections by Zygomycetes in 60 months – 4 proven cases in 1-4/2003, all caused by Rhizomucor pusillus, which had been identified in hospital environment before the clinical cases appeared. 2 proven cases 12/2005-1/2006 were identified by histology without further specification by culture. Four of 6 patients were after HSCT and 2 after therapy for acute leukemias. Five of 6 patients developed pulmonary form, one of HSCT patients developed disseminated form. 4 patients died from the progression of mycosis, one died from the relapsing malignancy, one patient lives without any sign of fungal infection.

**Conclusions:** The aforementioned cases support the evidence of poor outcome of zygomycoses in haematonoocology patients. The predominance of pulmonary form and high mortality in this patient group is in concordance with literature. The clustering of cases to two time periods and identification of Zygomycetes in hospital environment prior to the first period support the idea of higher vigilance and/or preventive measures (change in antymycotic policy or temporary closure of the unit) when these extremely dangerous fungi are found in the environment of immunocompromised patient.

### 66 Immunocompromised Patients with Possible Sphenoid Sinus Aspergilloma: The Role of Detection of Aspergillus Antigen Galactomannan

**Polyvz Kazila1, Eleni Kaitsa1, Soultana Kostopoulu1,**

**Evagelos Antonakis1, Vasiliak Gastari2, Eirini Katodritou2, Konstantinos Zervas2.** Laboratory of Microbiology, “Theagenio” Cancer Hospital, Thessaloniki Greece; 1Haematology Clinic, “Theagenio” Cancer Hospital, Thessaloniki Greece

**Background:** The invasive infections from Aspergillus are a major cause of morbidity and mortality in immunocompromised patients. The diagnosis is based on the histological tests and the growth of the fungus in a tissue culture, after a dangerous and therefore avoided in neutropenic patient’s biopsy. The combination of the detection of Aspergillus antigen Galactomannan (GM) in serum and X-ray findings is considered to be an indication equivalent to a positive biopsy sample.