## GLOBAL BURDEN AND TREATMENT OUTCOMES OF INVASIVE PULMONARY ASPERGILLOSIS IN HEMATOLOGICAL PATIENTS – CASE SERIES.

Sabina Schiopu[1], Mihaela Popescu[2], Mihaela Tevet[2], Oana Patrinoiu[2], Viola Popov[2], Daniela Georgescu[2], Marius Balea[2], Meilin Murat[2], Cornel Dragan[2]

1.The National Institute for Infectious Diseases "Prof. Dr. Matei Bals" –Bucuresti 2.Clinical Hospital Colentina – Bucuresti

The specific term invasive pulmonary aspergillosis (IPA) is defined as invasion of the pulmonary parenchyma by the growing hyphae of Aspergillus Species, with evidence of vascular invasion by the fungus. IPA is seen primarily in patients with haematological or solid organ malignancy and stem cell transplant recipients. We conducted an 18 months prospective survey on the IPA cases that were treated in the Hematology Department of Colentina Clinical Hospital. During the monitored period 5 patients were diagnosed with IPA and treated in our unit (4 with Voriconasole and 1 with Caspofungin). All of them were severely immnocompromised patients, with recent history of profound and prolonged neutropenic states. Pulmonary disease was present in all our patients, with evidence of disseminated infection in 40% of the cases. A high antifungal failure rate occurred and complete antifungal responses, with complete recovery of the patient, was noted in only one case. These results confirm that mortality from IPA in immunosuppressed patients remains high even if the newest, aggressive and sustained antifungal therapies were promptly initiated. We registered positive outcomes in less immunosuppressed patients who did not required new chemotherapy courses after the IPA episode. The registered high fatality rates, which are in concordance with the recent international published data, highlight the importance of introducing new diagnostic tools, adjusted approaches and new antifungal therapies for the IPA in patients at risk.