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P1237 Invasive aspergillosis in a whole institution: new kids on the block

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Background: Invasive aspergillosis (IA) is a traditional cause of morbidity and mortality in hematological patients (HEMA). In recent years, attention has shifted towards IA in non-HEMA patients, but information on IA in these populations is very scarce. The purpose of this study was to describe episodes of IA in non-HEMA patients and to compare them with those occurring in HEMA.

Materials/methods: Prospective study in which all patients with suspicion of IA, according to pre-established clinical criteria (antifungal therapy started) and/or laboratory alert results (positive cultures or positive biomarkers), were prospectively evaluated by expert physicians (antifungal stewardship group-AFS). All patients were discussed within the multidisciplinary group COMIC to revise diagnostic criteria.

Results: During the 2-year study period (Oct 2014-Oct 2016), IA was diagnosed in 43 patients (3 proven, 37 probable, and 3 possible). Main underlying diseases were: hematologic malignancy 13 (30.2%), advanced liver disease 12 (27.9%), COPD (chronic obstructive pulmonary disease) 9 (20.9%), solid organ cancer 8 (18.6%), advanced HIV 5 (11.6%) and autoimmune diseases 4 (9.3). Main risk factors included: corticosteroid treatment 19 (44.2%) and neutropenia 6 (14%). Non-HEMA (30, 69.8%) were compared with HEMA patients (13, 30.2%). NON HEMA patients were older (mean age 64.8 vs 54.1, p=0.05) and had more COPD (36.7% vs 0, p=0.02) and advanced liver disease (40.0 vs 0, p=0.08), had a higher Charlson comorbidity index (4.7. vs 1.1 p=0.007), less fever (56.7% vs 84.6%, p= 0.09) and more *A. fumigatus* infection (83.3% vs 30.8%, p=0.001). As for diagnosis, findings on thoracic CT were similar, as well as the sensitivity of galactomannan in serum and bronchoalveolar lavage fluid. Non-HEMA patients received less commonly combination antifungal therapy (NON HEMA 6.7% vs HEMA 30.8, p=0.05). Mortality rate was similar in both groups (53.3% vs 61.5%, p=0.74).

Conclusions: This prospective, structured, multidisciplinary assessment of a whole institution highlights the change in the epidemiology of invasive aspergillosis. Non hematologic patients, mainly cirrhotic and respiratory patients receiving high doses of corticosteroids, now constitute almost 70% of the cases. The mortality rate remains high in both populations.