

P0157 Clinical findings and outcomes in non-haematological/transplant patients with invasive pulmonary aspergillosis in a pulmonary referral centre in Mexico City

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Background: The ability to classify patients into proven and probable invasive pulmonary aspergillosis (IPA) according to EORTC/MSG definitions in Mexico has been difficult due to lack of galactomannan/pulmonary biopsies, CT scans or even staining tests. There are no studies in Mexico about clinical findings and outcomes of IPA in non haematological/transplant patients. In 2015 IPA and chronic pulmonary aspergillosis were reported part of the top ten serious fungal infections in Mexico.

Objective: Evaluate the clinical findings and outcomes in hospitalized Mexican patients with proven and probable IPA in a non haematological/transplant population.

Materials/methods: The National Institute of Respiratory Diseases in Mexico City is the national referral center for complicated pneumonias, including IPA, diagnostic tests are available to classify patients according to EORTC/MSG. We evaluated patients hospitalized from 2013 to 2018 with positive *Aspergillus* spp cultures and classified them into proven and probable IPA, we evaluated baseline clinical characteristics and outcomes.

Results: We evaluated 90 IPA patients, 45.6% proven and 54.4% probable, 56% male, mean age 50±17, 62% due to *A. fumigatus*, 29% with tuberculosis sequelae, among those IPA tested for flu 35% positive, 26% with type 2 diabetes mellitus, 14.5% with asthma/COPD (chronic obstructive pulmonary disease), 13% chronic steroid use and 27% smokers. On admission dyspnea in 60% and hemoptysis 40%, Chest CT scan with 32.2% cavities, 31% ground glass opacities and 13% consolidation. 49% positive serum galactomannan and 41% in BAL. 32.2% with ARDS (Acute Respiratory Distress Syndrome), 32% on mechanical ventilator support (MVS) and 27% admitted to the ICU unit. 20% mortality. Positive serum galactomannan OR 2.3 (95%IC 1.3-4.2), septic shock OR 2.4 (95%IC 1.3-186), steroid users OR 2.6 (95%IC 1.07-6.5), MVS OR 5.6 (95%IC 3.3-9.6), ICU admission OR 4 (95%IC 2.1-7.3) and ARDS OR 5.6 (95%IC 3.3-9.6) were associated with death, $p < 0.05$. There were no differences in clinical characteristics and outcomes among proven and probable patients.

Conclusions: At present, we do not use the EORTC/MSG definitions due to lack of tests in our country, which are useful for prompt diagnosis, prognosis and treatment in non haematological/transplant IPA patients in Mexico. Chronic pulmonary diseases with severe disease presentation are associated with poorer outcomes.