

P0152 Combination of invasive candidiasis and invasive aspergillosis

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Background: To investigate the frequency, risk factors, treatment outcome in patients with combination of invasive aspergillosis (IA) and invasive candidiasis (IC).

Materials/methods: Retrospective analysis of 715 adult patients with proven and probable IA in 1998 - 2017 yy. For the IA and IC diagnosis criteria EORTS/MSG, 2008 were used.

Results: IC was detected in 10 patients, 1.4% of all IA patients. The patients' age was from 18 to 59 years (median - 37), men - 60%. Among the underlying conditions acute leukemia prevailed - 60%, lymphoma - 10%, aplastic anemia - 10%, and hemolytic uremic syndrome - 10%.

Main risk factors were prolonged neutropenia - 90% (median - 10 days), lymphocytopenia - 70% (median - 19 days), ICU stay - 50%, and glucocorticosteroid therapy - 40%.

The main sites of IA were lungs (100%) and sinuses (20%). The main clinical variant of IC was candidemia (100%) with liver (10%) or spleen (10%) involvement.

Positive galactomannan test in bronchoalveolar lavage (BAL) was in 80% patients. Microscopy of BAL revealed septate mycelium in 20% patients, BAL culture was positive (*A.flavus*) in 20% cases. Diagnosis of IC was confirmed with blood culture in all patients: *C. krusei* - 40%, *C. parapsilosis* - 30%, *Candida* spp. - 30%.

All patients received antifungal therapy (voriconazole - 60%, amphotericin B deoxycholate - 60%, fluconazole - 30%, lipid amphotericin B - 20%, posaconazole - 20%). In patients with IA and IC 30-days overall survival rate was 60%, 12-weeks overall survival rate - 40%.

Conclusions: Invasive candidiasis was detected in 1.4% of patients with invasive aspergillosis. Main risk factors were prolonged neutropenia and lymphocytopenia, ICU stay, and glucocorticosteroid therapy. The main agents of invasive candidiasis were *C. krusei* - 40% and *C. parapsilosis* - 30%. The main clinical variant of invasive candidiasis was candidemia (100%) with liver (10%) or spleen (10%) involvement. In patients with invasive aspergillosis and invasive candidiasis 30-days overall survival rate was 60%, 12-weeks overall survival rate - 40%.