

P0151 Invasive aspergillosis caused by “rare” pathogens

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Background: Publications describing invasive aspergillosis (IA) caused by “rare” pathogens are limited.

Materials/methods: Retrospective analysis of the 780 patients with IA caused by “rare” pathogens in 1998-2018 yy. For the IA diagnosis EORTC / MSD, 2008 criteria were used.

Results: In 227 patients *Aspergillus* spp. were isolated. The “rare” pathogens were detected in 18 (8%), and these patients were included in group I; age varied from 5 to 67 years, median – 40.5, males – 50%. The control group consisted 209 patients with “common” *Aspergillus* spp. (*A. fumigatus*, *A. niger* and *A. flavus*), from 1 to 99 years old, median - 47, males – 53%. IA caused by “rare” pathogens, more often occurs in children (22% vs 11%, $p < 0.05$). In addition to standard risk factors, in these patients more often was detected lymphocytopenia 67% vs 55%, with duration 21 vs 14 days, $p < 0.05$, less frequent was noted fever (46% vs 78%, $p < 0.05$), but significantly more lung damage accompanied by hemoptysis (17% vs 10%, $p < 0.05$). “Rare” pathogens were *A. ustus* – 38%, *A. nidulans* – 22%, *A. calidoustus* – 8%, *A. versicolor* – 8%, *A. glaucus* – 8%, *A. candidus* – 8%, and *A. sydowii* – 8%. In “common” group etiological agents were *A. fumigatus* – 52%, *A. niger* – 31%, *A. flavus* – 17%. Two or more species of *Aspergillus* were isolated in 44% vs 9%, $p < 0.05$. Antifungal therapy was used in 100% vs 97% of patients. Twelve weeks overall survival rate was 82% vs 81%. In the group with “rare” pathogens more frequently observed relapse of IA – 33% vs 12%, $p < 0.05$.

Conclusions: Patients with “rare” pathogens account for 8% of patients with isolated *Aspergillus* spp. cultures. IA caused by “rare” pathogens, more often occurs in children – 22%. The features of IA caused by “rare” pathogens are: long-term lymphocytopenia (67%, median - 21 days), combination of two or more pathogens – 44%, high relapse rate – 33%. Survival of patients with “rare” pathogens does not differ from the total cohort of patients – 82%.

