

**P0155 Frequency, aetiology, diagnostics and treatment of invasive aspergillosis in patients with B-cell lymphoma (Hodgkin lymphoma and non-Hodgkin lymphoma)**

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**Background:** Invasive aspergillosis (IA) in patients with B-cell lymphoma (Hodgkin lymphoma and non-Hodgkin lymphoma), who receive cytostatic chemotherapy, is not studied enough.

**Materials/methods:** The study included 817 patients with B-cell lymphoma: Hodgkin lymphoma (HL) – 363, 16-65 years (median – 33), non-Hodgkin lymphoma (NHL) – 450, 19-74 years (median – 50). For the IA diagnosis criteria EORTS/MSG 2008 were used.

**Results:** Frequency of IA in patients with B-cell lymphoma was 4,98% (HL – 5,6%; NHL – 4,5%, p=0,49). In patients with relapse of NHL frequency of IA was 10,25%, during induction therapy – 2,88% (p=0,004). Etiological agents were: *A. fumigatus* (41%), *A. niger* (39%), *A. flavus* (14%). Risk factors for IA were: relapse of lymphoma (p=0,005), B-symptoms and radiation therapy in anamnesis (p=0,035 and p=0,041), profound neutropenia (p=0,000), concurrent lung and renal pathology (p=0,007 and p=0,03). The lungs were involved in 100% cases, 4,5% NHL patients had ≥2 organs involvement. Clinical symptoms of IA were nonspecific: fever 68%, cough 48%, dyspnea 32,5%, hemoptysis and pain in the chest – 4,7% vs 4% respectively. CT-signs of IA of lungs were nonspecific: focal changes 63,5%, infiltrates 58,7% and "ground-glass opacity" 23%; bilateral lung damage - 62,7%. Galactomannan test was positive in BAL fluid and serum in 83,6% cases. The presence of septate mycelium in BAL was observed at microscopy in 15,5% patients. *Aspergillus* spp. culture was obtained in 34,7% patients with B-cell lymphoma (HL – 20,4%; NHL – 46,3%, p=0,004). "Probable" IA was diagnosed in 92,9%, "proven" – in 7,1% cases. The main antifungal drug was voriconazole – 79%. Overall 12-weeks survival in patients with B-cell lymphoma was 84,9% (HL – 88,1%; NHL – 82,1%).

**Conclusions:** Frequency of IA in patients with B-cell lymphoma was 4,98% (HL – 5,6%; NHL – 4,5%), in patients with relapse of NHL - 10,25%. Risk factors for IA were: relapse of lymphoma (p=0,005), B-symptoms and radiation therapy in anamnesis (p=0,035 and p=0,041), profound neutropenia (p=0,000), concurrent lung and renal pathology (p=0,007 and p=0,03). Etiology agents were: *A. fumigatus* (41%), *A. niger* (39%), *A. flavus* (14%). Clinical and CT-signs were nonspecific. The main antifungal drug was voriconazole – 79%. Overall 12-weeks survival in patients with B-cell lymphoma was 84,9%.

