

P2224 Invasive fungal infections in paediatric allogeneic haematopoietic stem cell transplant recipients: experience at a large European transplant centreChristina Linke¹, Martina Ahlmann², Birgit Fröhlich², Birgit Burkhardt², Claudia Roessig², Andreas H. Groll*³

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Background: Allogeneic hematopoietic stem cell transplantation (HSCT) carries risks of infectious morbidity. Little is known, however, about the epidemiology of invasive fungal diseases (IFDs) in pediatric patients(pts) undergoing allogeneic HSCT in Germany.

Materials/methods: The retrospective single center study enrolled all pts who underwent allo-HSCT between 2005 and 2015. Primary endpoint was the incidence of proven, probable and possible IFDs (EORTC/MSG). All pts were to receive antifungal prophylaxis with fluconazole. Management of persistent fever consisted of blood cultures, pulmonary CT imaging, galactomannan (GM) screening in the case of infiltrates, and modification of antibacterial empiric therapy. Empirical or targeted antifungal therapy was at the discretion of the attending physician.

Results: A total of 221 first (196), second (21) or third (4) procedures were performed in 200 pts (median age: 9 y, r, 0.5-22) for leukemia/lymphoma (149) and non-malignant disorders (72) from a matched sibling (47), a matched unrelated (147) or a mismatched (27) donor. The median times to engraftment and to discharge were 22 (r, 9-50) and 34 (r, 17-194) days, respectively. Prophylaxis was administered to 208 HSCT procedures (94%; fluconazole, 116, mold-active agents, 92). At least one CT scan was performed in 146, and at least one GM assay was in 60 procedures. There were 15 cases of proven (candidemia, 4; aspergillosis, 4) or probable (aspergillosis, 7) IFDs, accounting for an incidence rate of 6.8% post-transplant. Twenty-nine pts (13.1%) fulfilled criteria of a possible pulmonary mold infection. Overall mortality at last follow-up (January 2017) was 32.1%; in 7 instances, death was attributable to IFD (3.2%).

Conclusions: Morbidity and mortality from IFDs at our institution were consistent with data reported from other centers worldwide. Utilization of health care resources for prevention, diagnosis and management of IFDs were considerable.

