

O109

Abstract (oral session)

Epidemiology and mortality of fungaemia in cancer patients - a clinical cohort of the Infectious Diseases Group (IDG) of the European Organization for Research and Treatment of Cancer (EORTC 65031)

O.A. Cornely*, B. Gachot, H. Akan, M. Bassetti, O. Uzun, C. Kibbler, O. Marchetti, J. Bille, P. de Burghgraeve, L. Pylkkanen, L. Ameye, M. Paesmans, J. Donnelly on behalf of the Infectious Diseases Group (IDG) of the European Organization for Research and Treatment of Cancer (EORTC 65031)

Background: To characterize the epidemiology and mortality of fungaemia among European cancer patients

Methods: Prospective cohort study including 145,030 patients (pts) with cancer in 13 EORTC centres in 8 European countries. Data were analyzed for incidence of fungaemia, demographics, clinical characteristics and outcome. Results: Fungaemia occurred in 333 (2.3‰; 95% CI, 2.1 – 2.6) pts, ranging from 1.5‰ in pts with solid tumors (ST) to 14.6‰ in recipients of haematopoietic stem cell transplantation for haematological malignancy (HM). In 297 pts with evaluable clinical data median age was 56 (range 17 – 88), 144 (48%) were female, 165 (56%) had ST, and 140 (47%) had HM. At time of fungaemia, remission of underlying cancer had been achieved in 29 (18%) of ST pts and in 20 (14%) of HM pts. Treatment in the prior 30 days encompassed chemotherapy in 142 (48%), radiotherapy in 22 (7%), immune suppressants in 88 (39%), antibiotics in 255 (86%), antifungals in 89 (30%), and major surgery in 69 (23%) pts. At time of fungaemia, 110 (38%) pts were neutropenic, 275 (93%) were febrile, and deep-organ involvement was documented in 83 (31%) pts. Central venous catheters (CVC) were used in 238 (80%), peripheral cannulas in 29 (10%), and both in 13 (4%) pts. The CVC was removed in 167 (67%) cases after a median of 3 d (min-max: 0-112). Candidaemia was documented in 267 (90%) pts, while 30 (10%) had fungaemia due to other fungi. Candidaemia was caused by *C. albicans* in 128 (48%) and by other *Candida* species in 145 (54%) pts (6 had >1 isolates). The survival rate after 4 weeks was 64% (95% CI, 59% - 70%) and decreased to 45% (95% CI, 39% - 51%) at 12 weeks. According to the investigators fungaemia was the sole cause of death within 12 weeks in 7 (5%) and had contributed to death in 62 (44%) pts. Survival was not significantly different between candidaemia caused by *C. albicans* versus other *Candida* species. Conclusions: Fungaemia was a rare complication in cancer patients from EORTC IDG centres, but was associated with or contributed to substantial mortality. *C. albicans* accounted for fewer than half the candidaemia cases. No difference in mortality was found comparing infections due to *C. albicans* versus other *Candida* spp.